





## Letters to the Editor

BRACKEN HOUSE, CANNON STREET, LONDON, EC4

## Joining the EEC • Export services • Customs barriers

Sir,—In another of his extremely thoughtful and useful articles, Gordon Tether (October 5) points out that conditions have changed in the Common Market since the debate began, that growth has become materially slower during the last two years and that on the latest figures industrial production over the region has actually declined.

But his conclusion that the assumptions on which the discussion has been proceeding should be re-examined, and that changes in the EEC change the value of the arguments for joining, all the arguments must fall immediately to the ground. Once it is made, the association with the EEC is for ever; there is no mechanism for rescinding the agreement. It is for better or for worse; for richer or for poorer; there is no happy release in death; and there is no provision for divorce. We know for certain that there will be times during, say, the next 50 years, when there will be recession in the EEC, probably extensive unemployment, no doubt even serious social and political unrest. There will of course be the good times too. But the argument for joining is internally consistent only if it maintains that even when there is recession and tension in the EEC, Britain will be better off in it than out side it.

## Weak arguments

In fact, we find that several of the arguments on which most emphasis has been laid have been surprisingly weak. First, there is the amazing post hoc, propter hoc argument which states that the EEC countries are prosperous because they are members of the EEC. (They have many other factors in common with Britain, they tend to eat very small Continental breakfasts.) Second, there is the argument that claims support on historical necessity. If ever there was a century which could teach us that there is nothing which cannot claim historical necessity, it must surely be the one in which we live.

The frequency with which these arguments are used lends some justice to Joe Rogaly's view (Why Economists can be Dangerous), that the whole debate is a monumental bore. It is indeed a tragic illustration of the Parkinsons of the subject, the more important the subject the more trivial does the discussion of it become. It also illustrates exactly John Stuart Mill's warning of the pit-falls of men whose thinking "wants discipline."

When they have to answer opponents [they] only endeavour, by such arguments as

they can command, to support the opposite conclusion, scarcely even attempting to confute the reasonings of their antagonists; and therefore, at the utmost, leaving the question, as far as it depends on argument, a balanced one."

David Fleming,  
25 Tazza Road, NW3.

## Playing politics

Sir,—With the plea that party unity should override all other considerations during the coming debates on our entry into the Common Market, it seems that the concept of Parliamentary Government is entering a new phase. If, for instance, Mr. Jenkins votes for Britain's entry the chances are that he will have done his homework and his constituents voting will be the result of a logical analysis of the facts—as his constituents would expect. On the other hand, some Socialists and some Tories vote against their party's wishes, will they automatically be voting against all subsequent clauses? What we will see to have at the end of the day is the system used in one-party countries being applied to Britain—that is, if, as is probable, the Whips are put on.

Equally, no commentator can accuse an individual Member of Parliament of going against his constituents' wishes when, apart from such a separate and clear issue as the fishing industry, upon which Lord Boothby hit the bullet, he is in the realms of speculation where only trial and error can prove him right or wrong.

The only guide in recent months to have proved truly indicative of the intentions of the countries concerned has been the world-wide quick-slow revaluations and devaluations which have given us the one free standard—stagnation.

If, as Mr. C. Gordon Tether suggests, the years of most glamorous growth for the EEC are coming to an end, we might postpone the expenditure of much cynicism but air in the House of Commons and wait for a further ten years while a divided Europe is more and more at the mercy of every wind that blows.

If on such an issue the parties choose to play politics, it is not surprising that their credibility, and the credibility of politicians in general, suffers at the hands of the mass media—faced as it

is with the almost impossible task of predigesting the most complex issues and serving them up as simple trivia to its ever more simple and bewildered audience. Thus the buckstopping version of the Common Market White Paper, which should have been a source of guidance to most people—turns out to be a party political document.

During the previous administration it would have been in fact a joint policy declaration—rather like the instructions for the use of gas masks in 1939—nobody disagreed with those.

Gerald Cox,  
15B, Kensington Palace Gardens, W.8.

## Services to exporters

Sir,—Some people have cause to be grateful for the range of now extensive Government services available to the British exporter. However there seems to have been a change in policy in that these services are not available to all exporters, but certain categories of exporters are given greater assistance than others; to use the current jargon, the principle of selectivity has been introduced.

To make the point clear, it is not just that some exporters have greater turnover and recourse than others which no one would dispute, but that among businesses of apparently equal merit, some receive official favour and some do not.

To take a medical parallel, a doctor has demands from both minor ailments and serious cases; equally he has a general list and his "private patients." It seems that the Government has drawn up a private patients' list of exporters.

Apart from the difficulty of telling which commercial organisation will eventually turn out to be profitable and which will not—and if Government intervention is to be justified, the volume of export traffic is everything, and considerations of the profitability of those exports comes nowhere—there is the further objection that a whole new area of potential nepotism is open. Anyone who is the beneficiary of integrity in the civil service will use the term nepotism with caution, but nevertheless it is highly undesirable that the temptation should exist. I think with horror about the manufacturer who told me: "Always site your factory in a marginal constituency."

One must repeat that a proper function of Government is to strike down privilege, not to create it. Some earlier ministerial action over the imposition

of anti-dumping duties makes one suspect—one hopes without foundation—that some decisions are made in private on the basis of tell-tale some sort of covert agreement exists between certain industries and Government.

An extension of secret privilege is quite wrong and not in the public interest. If the Government range of export services are now so wide that they are physically unable to extend them equally to all who satisfy certain proclaimed criteria, then it is better to withdraw those services altogether than to introduce selectivity.

The only possible guide in these circumstances is a fair level and no favour if it is to avoid the real situation of some exporters being deemed more equal than other exporters; and indeed when one recalls Thomas Jefferson's maxim "A trader has no country" it is not an open question whether trade is reasonable, and whether exporters are deserving of any special help at all?

Michael D. K. Turner,  
11, The Close,  
Montreal Park, Sevenoaks.

## Wastefulness of unemployment

Sir,—We have already had Mr. Brittan saying that he is not going to talk about unemployment any more, but only about the number of vacancies. Now we have Mr. Rogaly saying that we need a new definition of unemployment, because he has been to Newcastle and finds that people there are wearing shoes.

We do not need a new definition of unemployment. The definition he himself quotes from the OED is excellent: "not put to use; not applied to some end or purpose." The unemployed are people who want jobs and cannot get them. It is a bad thing, regardless of the economic circumstances. One of the marks of a good society is that it provides work opportunities for those who want them. The tragedy of unemployment at the moment is the hundreds and thousands of people who are made to feel useless. It is not just the registered unemployed; all kinds of people on the margin of employment (the partially disabled, for example) are pushed out into living basically empty lives.

It is not of course to make so many people feel that they are useless; it is wasteful. The individual businessman may congratulate himself on getting rid of relatively unproductive labour, but society doesn't shoot those men. It provides them with an income which is often

not much lower than the income they received from their work. So, from society's point of view, what happens is that these people are paid for doing nothing instead of for doing something, and are made to feel social outcasts into the bargain.

When Mr. Rogaly says that policies to meet the needs of "aged men of little or no skills" are different from those needed to get unemployment down, he is wrong. With a generally high level of demand, these people find a niche in society. The "unemployable" are discovered not to be unemployable any more. This has always been one of the arguments for running the economy at a high pressure of demand—arguments that are stronger now than they have ever been since the one advantage claimed for a low pressure of demand—that it slowed down the rate of inflation—is seen to be invalid.

Mr. Rogaly's article is all the more annoying because a few days ago we were treated by him to a lecture on the myopia of the exclusively economic view of this article. It is an example of wide-ranging, multi-disciplinary wisdom, then please let us go back to the economics which knows about the difference between social and private costs and is aware of the aim of economic activity is the provision of human satisfactions.

Frank Blackaby,  
62 St. Peter's Road, Croydon.

## Four kinds of unemployed

Sir,—I should like to say how much I enjoyed reading Joe Rogaly's article of October 8, on the subject of "Unemployment"—and the need for a new definition.

The main point as I see it which his article makes—and a point which in my view is very much in need of emphasis in the present frenzy to reflate the economy at almost any cost and in any way possible, is that a million unemployed in 1971 is quite a different sort of figure from a million unemployed in 1931, quite apart from the size of the labour force. Mr. Rogaly distinguishes between short run and long run unemployment, claiming that both are clearly undesirable. He then goes on to distinguish four kinds of unemployment: (i) those who would be employable regardless of the tightness of the labour market, (ii) those who are voluntarily unemployed (such as individuals changing jobs, those who because of their skills find it financially advantageous

to register as unemployed and moonlight, etc.), (iii) those who find themselves unemployed but are not prepared to move either geographically or between jobs, and (iv) those who are genuinely involuntarily unemployed even though they would be prepared to take a variety of jobs and move a considerable distance to find work.

It is high time that the Ministry of Labour through use of regular samples of the unemployed provided disaggregated statistics which tried to relate unemployment as an aggregate figure to the concept of economic welfare. The crucial fact in assessing the present statistics is the size of the fourth category, and hardly anyone seems to know what it is or even give a tolerably accurate guess. Until we are able to do so it is intellectually dishonest to use unemployment as the big stick to beat the inflationary drum.

Brian Griffiths,  
The London School of Economics and Political Science,  
Houghton Street,  
Aldwych, W.C.2.

## Private use of vehicles

Sir,—At week-ends one sees the vans and lorries of major British firms parked in places where their business is unlikely to be taken on the vehicle. I assume that multiple grocers do not send their drivers to pick mushrooms in the fields.

Could those firms which do not permit the private use of their vehicles by their staff not indicate to the public found a "not private user" lorry in a lane or on a side-street be could assume it was stolen and inform the police.

P. A. Daniell,  
9, Cranleigh Close,  
Weighton Road, S.E.20.

## Production job for BSA

Sir,—The decline in demand for its products has apparently given rise to BSA's current problems and the redundancies anticipated for production staff. Yet, in another, not altogether dissimilar industry, Carlton Cycles/Raleigh—a Tube Investments company—have reported production at top capacity to try to keep pace with a rapidly growing demand for cycles at home, and increasingly from abroad.

It is not possible for some time to see production work for Raleigh/Carlton to be under-

taken on a contractual basis by BSA for the benefit of both companies? Although I am not familiar with the detailed production processes, I feel that there must be common skills and methods between cycle and motor-cycle manufacture to enable the staff whose jobs are in jeopardy to benefit.

M. F. O'Meara,  
144, Demesne Road,  
Wilmington, Surrey.

## A letter destroyed

Sir,—On Friday October 1 the postman attempted to deliver a letter from Italy to 38, Francis Street, Brighton, the house being empty the letter was not delivered. The department to re-claim undelivered mail opens till 5 p.m. Friday, till noon Saturday, then opens Monday. I went first thing Monday morning October 5 to claim my letter, only to be informed the letter had been destroyed. Who gives the GPO the authority to destroy in a matter of hours our mail?

How soon before letters are destroyed is a matter of minutes. Just how long are these faceless wonders, who must be of unsound mind, going to be allowed to carry on like this?

H. A. Geary,  
2 Ivory Place,  
Brighton.

## Valuation by U.K. Customs

Sir,—I was born an Englishman, but am now a naturalised American. I have occasion to import English products into the U.S. and American products into the U.K. Before the English businessmen shout at unfair treatment they should set their own house in order with regard to import restrictions. The intent of duty levied by customs is to bring the value of foreign goods to the same level as domestic goods. In the U.S. the duty is assessed on the cost of the article listed as the selling price required by the U.K. manufacturer. This usually includes packing and freight to the dock. The sea, air or sea/air freight costs do not come into the customs assessment. If an article has a 10 per cent import duty then this would be levied on the U.K. manufacturer's required price. If the freight was air and relatively high it would not change the import duty required by the U.S.

Now consider the important U.K. If the article is listed at the selling price required by the U.S. manufacturer, assuming he is fit, ought to win the Newton Handicap Hurdle (3.15). Best View Chase "qualifier" (3.05) at Cheltenham between Gernon and Foster Handicap Chase (3.45) for W. Stephenson's Bishop Auction stable, and Bultzar has the best of it. In the 11.15 Hurdle Novices Hurdle (4.45) judged on their running at Sedgfield last week.

Low Pastures, assuming he is fit, ought to win the Newton Handicap Hurdle (3.15). Best View Chase "qualifier" (3.05) at Cheltenham between Gernon and Foster Handicap Chase (3.45) for W. Stephenson's Bishop Auction stable, and Bultzar has the best of it. In the 11.15 Hurdle Novices Hurdle (4.45) judged on their running at Sedgfield last week.

Low Pastures, assuming he is fit, ought to win the Newton Handicap Hurdle (3.15). Best View Chase "qualifier" (3.05) at Cheltenham between Gernon and Foster Handicap Chase (3.45) for W. Stephenson's Bishop Auction stable, and Bultzar has the best of it. In the 11.15 Hurdle Novices Hurdle (4.45) judged on their running at Sedgfield last week.

Low Pastures, assuming he is fit, ought to win the Newton Handicap Hurdle (3.15). Best View Chase "qualifier" (3.05) at Cheltenham between Gernon and Foster Handicap Chase (3.45) for W. Stephenson's Bishop Auction stable, and Bultzar has the best of it. In the 11.15 Hurdle Novices Hurdle (4.45) judged on their running at Sedgfield last week.

Low Pastures, assuming he is fit, ought to win the Newton Handicap Hurdle (3.15). Best View Chase "qualifier" (3.05) at Cheltenham between Gernon and Foster Handicap Chase (3.45) for W. Stephenson's Bishop Auction stable, and Bultzar has the best of it. In the 11.15 Hurdle Novices Hurdle (4.45) judged on their running at Sedgfield last week.

Low Pastures, assuming he is fit, ought to win the Newton Handicap Hurdle (3.15). Best View Chase "qualifier" (3.05) at Cheltenham between Gernon and Foster Handicap Chase (3.45) for W. Stephenson's Bishop Auction stable, and Bultzar has the best of it. In the 11.15 Hurdle Novices Hurdle (4.45) judged on their running at Sedgfield last week.

Low Pastures, assuming he is fit, ought to win the Newton Handicap Hurdle (3.15). Best View Chase "qualifier" (3.05) at Cheltenham between Gernon and Foster Handicap Chase (3.45) for W. Stephenson's Bishop Auction stable, and Bultzar has the best of it. In the 11.15 Hurdle Novices Hurdle (4.45) judged on their running at Sedgfield last week.

Low Pastures, assuming he is fit, ought to win the Newton Handicap Hurdle (3.15). Best View Chase "qualifier" (3.05) at Cheltenham between Gernon and Foster Handicap Chase (3.45) for W. Stephenson's Bishop Auction stable, and Bultzar has the best of it. In the 11.15 Hurdle Novices Hurdle (4.45) judged on their running at Sedgfield last week.

Low Pastures, assuming he is fit, ought to win the Newton Handicap Hurdle (3.15). Best View Chase "qualifier" (3.05) at Cheltenham between Gernon and Foster Handicap Chase (3.45) for W. Stephenson's Bishop Auction stable, and Bultzar has the best of it. In the 11.15 Hurdle Novices Hurdle (4.45) judged on their running at Sedgfield last week.

Low Pastures, assuming he is fit, ought to win the Newton Handicap Hurdle (3.15). Best View Chase "qualifier" (3.05) at Cheltenham between Gernon and Foster Handicap Chase (3.45) for W. Stephenson's Bishop Auction stable, and Bultzar has the best of it. In the 11.15 Hurdle Novices Hurdle (4.45) judged on their running at Sedgfield last week.

Low Pastures, assuming he is fit, ought to win the Newton Handicap Hurdle (3.15). Best View Chase "qualifier" (3.05) at Cheltenham between Gernon and Foster Handicap Chase (3.45) for W. Stephenson's Bishop Auction stable, and Bultzar has the best of it. In the 11.15 Hurdle Novices Hurdle (4.45) judged on their running at Sedgfield last week.

Low Pastures, assuming he is fit, ought to win the Newton Handicap Hurdle (3.15). Best View Chase "qualifier" (3.05) at Cheltenham between Gernon and Foster Handicap Chase (3.45) for W. Stephenson's Bishop Auction stable, and Bultzar has the best of it. In the 11.15 Hurdle Novices Hurdle (4.45) judged on their running at Sedgfield last week.

Low Pastures, assuming he is fit, ought to win the Newton Handicap Hurdle (3.15). Best View Chase "qualifier" (3.05) at Cheltenham between Gernon and Foster Handicap Chase (3.45) for W. Stephenson's Bishop Auction stable, and Bultzar has the best of it. In the 11.15 Hurdle Novices Hurdle (4.45) judged on their running at Sedgfield last week.

Low Pastures, assuming he is fit, ought to win the Newton Handicap Hurdle (3.15). Best View Chase "qualifier" (3.05) at Cheltenham between Gernon and Foster Handicap Chase (3.45) for W. Stephenson's Bishop Auction stable, and Bultzar has the best of it. In the 11.15 Hurdle Novices Hurdle (4.45) judged on their running at Sedgfield last week.

Low Pastures, assuming he is fit, ought to win the Newton Handicap Hurdle (3.15). Best View Chase "qualifier" (3.05) at Cheltenham between Gernon and Foster Handicap Chase (3.45) for W. Stephenson's Bishop Auction stable, and Bultzar has the best of it. In the 11.15 Hurdle Novices Hurdle (4.45) judged on their running at Sedgfield last week.

Low Pastures, assuming he is fit, ought to win the Newton Handicap Hurdle (3.15). Best View Chase "qualifier" (3.05) at Cheltenham between Gernon and Foster Handicap Chase (3.45) for W. Stephenson's Bishop Auction stable, and Bultzar has the best of it. In the 11.15 Hurdle Novices Hurdle (4.45) judged on their running at Sedgfield last week.

Low Pastures, assuming he is fit, ought to win the Newton Handicap Hurdle (3.15). Best View Chase "qualifier" (3.05) at Cheltenham between Gernon and Foster Handicap Chase (3.45) for W. Stephenson's Bishop Auction stable, and Bultzar has the best of it. In the 11.15 Hurdle Novices Hurdle (4.45) judged on their running at Sedgfield last week.

Low Pastures, assuming he is fit, ought to win the Newton Handicap Hurdle (3.15). Best View Chase "qualifier" (3.05) at Cheltenham between Gernon and Foster Handicap Chase (3.45) for W. Stephenson's Bishop Auction stable, and Bultzar has the best of it. In the 11.15 Hurdle Novices Hurdle (4.45) judged on their running at Sedgfield last week.

Low Pastures, assuming he is fit, ought to win the Newton Handicap Hurdle (3.15). Best View Chase "qualifier" (3.05) at Cheltenham between Gernon and Foster Handicap Chase (3.45) for W. Stephenson's Bishop Auction stable, and Bultzar has the best of it. In the 11.15 Hurdle Novices Hurdle (4.45) judged on their running at Sedgfield last week.

Low Pastures, assuming he is fit, ought to win the Newton Handicap Hurdle (3.15). Best View Chase "qualifier" (3.05) at Cheltenham between Gernon and Foster Handicap Chase (3.45) for W. Stephenson's Bishop Auction stable, and Bultzar has the best of it. In the 11.15 Hurdle Novices Hurdle (4.45) judged on their running at Sedgfield last week.

Low Pastures, assuming he is fit, ought to win the Newton Handicap Hurdle (3.15). Best View Chase "qualifier" (3.05) at Cheltenham between Gernon and Foster Handicap Chase (3.45) for W. Stephenson's Bishop Auction stable, and Bultzar has the best of it. In the 11.15 Hurdle Novices Hurdle (4.45) judged on their running at Sedgfield last week.

Low Pastures, assuming he is fit, ought to win the Newton Handicap Hurdle (3.15). Best View Chase "qualifier" (3.05) at Cheltenham between Gernon and Foster Handicap Chase (3.45) for W. Stephenson's Bishop Auction stable, and Bultzar has the best of it. In the 11.15 Hurdle Novices Hurdle (4.45) judged on their running at Sedgfield last week.

Low Pastures, assuming he is fit, ought to win the Newton Handicap Hurdle (3.15). Best View Chase "qualifier" (3.05) at Cheltenham between Gernon and Foster Handicap Chase (3.45) for W. Stephenson's Bishop Auction stable, and Bultzar has the best of it. In the 11.15 Hurdle Novices Hurdle (4.45) judged on their running at Sedgfield last week.

Low Pastures, assuming he is fit, ought to win the Newton Handicap Hurdle (3.15). Best View Chase "qualifier" (3.05) at Cheltenham between Gernon and Foster Handicap Chase (3.45) for W. Stephenson's Bishop Auction stable, and Bultzar has the best of it. In the 11.15 Hurdle Novices Hurdle (4.45) judged on their running at Sedgfield last week.

Low Pastures, assuming he is fit, ought to win the Newton Handicap Hurdle (3.15). Best View Chase "qualifier" (3.05) at Cheltenham between Gernon and Foster Handicap Chase (3.45) for W. Stephenson's Bishop Auction stable, and Bultzar has the best of it. In the 11.15 Hurdle Novices Hurdle (4.45) judged on their running at Sedgfield last week.

Low Pastures, assuming he is fit, ought to win the Newton Handicap Hurdle (3.15). Best View Chase "qualifier" (3.05) at Cheltenham between Gernon and Foster Handicap Chase (3.45) for W. Stephenson's Bishop Auction stable, and Bultzar has the best of it. In the 11.15 Hurdle Novices Hurdle (4.45) judged on their running at Sedgfield last week.

Low Pastures, assuming he is fit, ought to win the Newton Handicap Hurdle (3.15). Best View Chase "qualifier" (3.05) at Cheltenham between Gernon and Foster Handicap Chase (3.45) for W. Stephenson's Bishop Auction stable, and Bultzar has the best of it. In the 11.15 Hurdle Novices Hurdle (4.45) judged on their running at Sedgfield last week.

Low Pastures, assuming he is fit, ought to win the Newton Handicap Hurdle (3.15). Best View Chase "qualifier" (3.05) at Cheltenham between Gernon and Foster Handicap Chase (3.45) for W. Stephenson's Bishop Auction stable, and Bultzar has the best of it. In the 11.15 Hurdle Novices Hurdle (4.45) judged on their running at Sedgfield last week.

Low Pastures, assuming he is fit, ought to win the Newton Handicap Hurdle (3.15). Best View Chase "qualifier" (3.05) at Cheltenham between Gernon and Foster Handicap Chase (3.45) for W. Stephenson's Bishop Auction stable, and Bultzar has the best of it. In the 11.15 Hurdle Novices Hurdle (4.45) judged on their running at Sedgfield last week.

Low Pastures, assuming he is fit, ought to win the Newton Handicap Hurdle (3.15). Best View Chase "qualifier" (3.05) at Cheltenham between Gernon and Foster Handicap Chase (3.45) for W. Stephenson's Bishop Auction stable, and Bultzar has the best of it. In the 11.15 Hurdle Novices Hurdle (4.45) judged on their running at Sedgfield last week.

Low Pastures, assuming he is fit, ought to win the Newton Handicap Hurdle (3.15). Best View Chase "qualifier" (3.05) at Cheltenham between Gernon and Foster Handicap Chase (3.45) for W. Stephenson's Bishop Auction stable, and Bultzar has the best of it. In the 11.15 Hurdle Novices Hurdle (4.45) judged on their running at Sedgfield last week.

Low Pastures, assuming he is fit, ought to win the Newton Handicap Hurdle (3.15). Best View Chase "qualifier" (3.05) at Cheltenham between Gernon and Foster Handicap Chase (3.45) for W. Stephenson's Bishop Auction stable, and Bultzar has the best of it. In the 11.15 Hurdle Novices Hurdle (4.45) judged on their running at Sedgfield last week.

Low Pastures, assuming he is fit, ought to win the Newton Handicap Hurdle (3.15). Best View Chase "qualifier" (3.05) at Cheltenham between Gernon and Foster Handicap Chase (3.45) for W. Stephenson's Bishop Auction stable, and Bultzar has the best of it. In the 11.15 Hurdle Novices Hurdle (4.45) judged on their running at Sedgfield last week.

Low Pastures, assuming he is fit, ought to win the Newton Handicap Hurdle (3.15). Best View Chase "qualifier" (3.05) at Cheltenham between Gernon and Foster Handicap Chase (3.45) for W. Stephenson's Bishop Auction stable, and Bultzar has the best of it. In the 11.15 Hurdle Novices Hurdle (4.45) judged on their running at Sedgfield last week.

Low Pastures, assuming he is fit, ought to win the Newton Handicap Hurdle (3.15). Best View Chase "qualifier" (3.05) at Cheltenham between Gernon and Foster Handicap Chase (3.45) for W. Stephenson's Bishop Auction stable, and Bultzar has the best of it. In the 11.15 Hurdle Novices Hurdle (4.45) judged on their running at Sedgfield last week.

Low Pastures, assuming he is fit, ought to win the Newton Handicap Hurdle (3.15). Best View Chase "qualifier" (3.05) at Cheltenham between Gernon and Foster Handicap Chase (3.45) for W. Stephenson's Bishop Auction stable, and Bultzar has the best of it. In the 11.15 Hurdle Novices Hurdle (4.45) judged on their running at Sedgfield last week.

Low Pastures, assuming he is fit, ought to win the Newton Handicap Hurdle (3.15). Best View Chase "qualifier" (3.05) at Cheltenham between Gernon and Foster Handicap Chase (3.45) for W. Stephenson's Bishop Auction stable, and Bultzar has the best of it. In the 11.15 Hurdle Novices Hurdle (4.45) judged on their running at Sedgfield last week.

Low Pastures, assuming he is fit, ought to win the Newton Handicap Hurdle (3.15). Best View Chase "qualifier" (3.05) at Cheltenham between Gernon and Foster Handicap Chase (3.45) for W. Stephenson's Bishop Auction stable, and Bultzar has the best of it. In the 11.15 Hurdle Novices Hurdle (4.45) judged on their running at Sedgfield last week.

Low Pastures, assuming he is fit, ought to win the Newton Handicap Hurdle (3.15). Best View Chase "qualifier" (3.05) at Cheltenham between Gernon and Foster Handicap Chase (3.45) for W. Stephenson's Bishop Auction stable, and Bultzar has the best of it. In the 11.15 Hurdle Novices Hurdle (4.45) judged on their running at Sedgfield last week.

Low Pastures, assuming he is fit, ought to win the Newton Handicap Hurdle (3.15). Best View Chase "qualifier" (3.05) at Cheltenham between Gernon and Foster Handicap Chase (3.45) for W. Stephenson's Bishop Auction stable, and Bultzar has the best of it. In the 11.15 Hurdle Novices Hurdle (4.45) judged on their running at Sedgfield last week.

Low Pastures, assuming he is fit, ought to win the Newton Handicap Hurdle (3.15). Best View Chase "qualifier" (3.05) at Cheltenham between Gernon and Foster Handicap Chase (3.45) for W. Stephenson's Bishop Auction stable, and Bultzar has the best of it. In the 11.15 Hurdle Novices Hurdle (4.45) judged on their running at Sedgfield last week.

Low Pastures, assuming he is fit, ought to win the Newton Handicap Hurdle (3.15). Best View Chase "qualifier" (3.05) at Cheltenham between Gernon and Foster Handicap Chase (3.45) for W. Stephenson's Bishop Auction stable, and Bultzar has the best of it. In the 11.15 Hurdle Novices Hurdle (4.45) judged on their running at Sedgfield last week.

Low Pastures, assuming he is fit, ought to win the Newton Handicap Hurdle (3.15). Best View Chase "qualifier" (3.05) at Cheltenham between Gernon and Foster Handicap Chase (3.45) for W. Stephenson's Bishop Auction stable, and Bultzar has the best of it. In the 11.15 Hurdle Novices Hurdle (4.45) judged on their running at Sedgfield last week.

Low Pastures, assuming he is fit, ought to win the Newton Handicap Hurdle (3.15). Best View Chase "qualifier" (3.05) at Cheltenham between Gernon and Foster Handicap Chase (3.45) for W. Stephenson's Bishop Auction stable, and Bultzar has the best of it. In the 11.15 Hurdle Novices Hurdle (4.45) judged on their running at Sedgfield last week.

Low Pastures, assuming he is fit, ought to win the Newton Handicap Hurdle (3.15). Best View Chase "qualifier" (3.05) at Cheltenham between Gernon and Foster Handicap Chase (3.45) for W. Stephenson's Bishop Auction stable, and Bultzar has the best of it. In the 11.15 Hurdle Novices Hurdle (4.45) judged on their running at Sedgfield last week.

Low Pastures, assuming he is fit, ought to win the Newton Handicap Hurdle (3.15). Best View Chase "qualifier" (3.05) at Cheltenham between Gernon and Foster Handicap Chase (3.45) for W. Stephenson's Bishop Auction stable, and Bultzar has the best of it. In the 11.15 Hurdle Novices Hurdle (4.45) judged on their running at Sedgfield last week.

Low Pastures, assuming he is fit, ought to win the Newton Handicap Hurdle (3.15). Best View Chase "qualifier" (3.05) at Cheltenham between Gernon and Foster Handicap Chase (3.45) for W. Stephenson's Bishop Auction stable, and Bultzar has the best of it. In the 11.15 Hurdle Novices Hurdle (4.45) judged on their running at Sedgfield last week.

Low Pastures, assuming he is fit, ought to win the Newton Handicap Hurdle (3.15). Best View Chase "qualifier" (3.05) at Cheltenham between Gernon and Foster Handicap Chase (3.45) for W. Stephenson's Bishop Auction stable, and Bultzar has the best of it. In the 11.15 Hurdle Novices Hurdle (4.45) judged on their running at Sedgfield last week.

Low Pastures, assuming he is fit, ought to win the Newton Handicap Hurdle (3.15). Best View Chase "qualifier" (3.05) at Cheltenham between Gernon and Foster Handicap











## American News

### Panama to get new constitution

By Our Own Correspondent

PANAMA, Oct. 12. NEW constitution to be prepared by about 500 *Corregidores* (city of mayor and magistrate) before August 1972, a new labour code and an indication of impatience with the U.S. among the "important announcements" made by Panama's dictator, Brig. Gen. Torrijos on Monday.

Speaking before a crowd some 100,000 expected to attend the downtown rally marking the third anniversary of the coup which brought him to power, Torrijos said the *Corregidores* would also decide the type of Government desired to rule Panama.

He said the new labour code would become effective on January 1, 1972. It would establish a labour court for rural workers, provide conciliation for collective contracts, make deduction of union dues by employers obligatory and would cover thousands of workers such as shermen and peddlers.

Referring to relations between Panama and the U.S. insofar as the U.S.-controlled Panama Canal Zone is concerned, Torrijos challenged the U.S. to demonstrate that "they are the true leaders of liberty" by restoring to Panama total sovereignty over the Canal Zone.

### Los Angeles port still idle

LOS ANGELES, Oct. 12. A NEW dispute is continuing to delay a return to work in the port of Los Angeles after the temporary end to the 101-day West Coast dock strike. Work continued yesterday in most of the 24 West Coast ports but Los Angeles and Long Beach were still idle over a dispute on who should operate cranes and other handling equipment.

Port authorities said because of this holdup they did not expect work to resume here before next week-end. Shippers are demanding the right to pick the men they want to handle cranes.

President Nixon last week ordered a temporary halt to the strike so that negotiations could be continued during an 80-day cooling off period.

## U.S. unions to co-operate in next economic phase

WASHINGTON, Oct. 12. THE U.S. labour movement agreed today to co-operate with the second phase of the Administration's economic control, after getting a statement initiated by President Nixon that said the Government would not veto Wage and Price Board decisions.

George Meany, President of the AFL-CIO trade union federation, said labour representatives would "help try to make the mechanisms" work and would serve on the Board that will review wage increases following the end of the 90-day wage-price freeze November 13.

But the AFL-CIO Executive Council and the leaders of the Teamsters and Auto Workers unions said they would set up watchdog units across the nation to monitor prices and make sure that there were no violations of the Administration's price controls.

Labour Secretary James D. Hodgson and Director George P. Shultz of the White House Office of Management and Budget met

for about 40 minutes with Mr. Meany before the Executive Council session. They handed him a statement initiated Tuesday by Mr. Nixon outlining the roles of the Wage Board, the Price Commission and Mr. Nixon's Cost of Living Council (COLC).

One paragraph of the document said: "The COLC will not approve, disapprove or serve as an appeal level for case decisions made by the Pay Board and Price Commission and it will not approve, revise, veto or revoke specific standards or criteria developed by the Pay Board and Price Commission."

The statement apparently was the assurance needed by the labour leaders that decisions of the Board that conflicted with Administration's anti-inflation policy would not be overruled by the COLC.

The document also said the Pay Board and Price Commission would have the power of establishing standards and criteria,

and of "rendering final decisions on individual cases".

Mr. Meany said that on the basis of the assurances given in the statement initiated by Mr. Nixon, the AFL-CIO Executive Council adopted a statement pledging co-operation and willingness to serve on the Pay Board.

On Capitol Hill, Congressional sources reported that Mr. Nixon would ask Wednesday for legislation to carry out the second phase plan, including establishment of a three-man panel of Federal Judges to consider Wage and Price Board appeals.

It was understood that the request would come in the form of legislation to extend the 1970 wage-price control law that gave the President authority to impose the freeze by August 15. The present law expires May 1, 1972, and the President will ask for a one-year extension, sources said.

### Nixon confirms textile deadline of Oct. 15

BY GUY DE JONQUIERES

WASHINGTON, Oct. 12. PRESIDENT Nixon today threatened openly to impose unilateral restrictions on imports of Japanese-made textiles unless a voluntary limitation agreement is reached or is close to being reached by October 15.

Reports that the U.S. has set a mid-October deadline for its negotiations with Far Eastern textile producing countries have been circulating in Washington for some time, but this is the first time that any member of the Administration has officially confirmed them.

Informal discussions between the U.S. and the Governments of Japan, Hong Kong, Taiwan and South Korea were started up several weeks ago in a renewed attempt to achieve an imports agreement which will appease Mr. Nixon's southern textile constituency before next year's November elections.

However, until now the negotiations have made little or no progress. The chief stumbling block has been failure to reach any substantive agreement with the Japanese Government, which is under strong pressure from its own textile industry not to negotiate.

Yesterday the Japanese Cabinet decided to have another attempt at reaching a settlement, following a lapse in its talks with the U.S. which stemmed from the deadlock. This decision has raised some hopes in the Administration that the U.S. threat of unilateral restrictions

is having some effect and that the Japanese may finally be ready to take a more flexible position.

The President, who called a surprise Press conference at the White House this morning, would not however comment on the Japanese move or give any assessment of the prospects for a voluntary settlement. If quotas were imposed they would apply only to man-made textiles from the Far East.

Our Tokyo Correspondent writes: The Japanese Cabinet has authorised Kakuei Tanaka, Minister of International Trade and Industry, to reopen government level negotiations with the United States on restricting Japan's textile exports to the American market in a last-minute attempt to beat Washington's October 15 ultimatum.

Some sort of agreement is expected to be arrived at before Friday when the American deadline expires. Prime Minister Eisaku Sato has instructed Mr. Tanaka to exert his best efforts to obtain concessions from the United States' negotiators in the best interests of the Japanese textile industry, which is opposed to the talks.

Mr. Tanaka has promised the industry that he would not agree to any textile arrangement which was not accompanied by an understanding with the U.S. negotiators that the existing 10 per cent tariff surcharge first would be removed on the import of textile products.

### Supreme Court nominees to be announced soon

By Guy de Jonquieres

WASHINGTON, Oct. 12. MR. NIXON said today that he would end speculation over whom he will nominate to the Supreme Court by announcing his two new appointees by next week. He must find replacements for Justices John Harlan, who has retired, and Justice Hugo Black who died last month.

The President has said that at least one of his nominees must be of a conservative bent and preferably from the South. However, his choice was complicated last week when Republican Richard Poff, who was front-runner for nomination to one of the vacant seats, voluntarily withdrew from consideration on the grounds that he did not want to face the trial of what was expected to be a difficult confirmation process by the Senate.

Mr. Nixon said today that other names are under consideration, including those of two women.

## CANADIAN FEDERAL PROBLEMS

# Real chance of breakthrough

BY ROBERT GIBBENS, MONTREAL CORRESPONDENT

FEW THINGS are more confusing in the Canadian Federation than the long-drawn-out process of constitutional reform. For most Canadians, this vaguely concerns "repatriation" of the constitution which still exists by virtue of a British Act of Parliament, though they have been quite aware for a generation that the Mother of Parliaments has not had the slightest wish to interfere in Canada's domestic political affairs, let alone to apply an anachronistic and purely technical veto to any changes proposed to the British North America Act.

### Disgust

After Quebec's rejection last June of a proposed Canadian constitution, the so-called Victoria Charter, everyone appeared to have thrown up their hands in righteous disgust at another deadlock. Many dire predictions about the future of confederation were made on both sides of the fence—in Quebec and the rest of Canada.

It is perhaps because of the lack of public interest in the general issue that the Trudeau Government, Quebec and those other provinces which do show any interest can let the pace be rather leisurely. It is after all not a bread-and-butter issue. It is, however, almost traditional that a Quebec Government must make some kind of constitutional demand and if at all possible show that Ottawa has had to yield a little. Last June it was politically necessary for the Quebec Premier, M. Robert Bourassa, to appear to be standing firm against Ottawa's centralisation policies. Yet now there does seem to be a real chance of a breakthrough without too much posturing on either side.

Quebec, since the start of the Pearson era, has made considerable progress towards autonomy in certain administrative areas: the so-called opt-out process under which Quebec has taken over administration of programmes involving federal funds, is one example, though these continue to be operated by Ottawa for other provinces. Ontario has moved in the same direction, but not nearly so fast.

Quebec has argued that the rights it has obtained were always implicit in the Constitution anyway, and in many cases had been usurped by the federal power during the emergency of World War II. One of the most important examples for Quebec was its success in negotiating the right to operate its own Pension Plan, similar in standards to the Canada Pension Plan applying in other provinces. Quebec has full control of the funds collected from the public in contributions, and it has meant in practice a small measure of financial independence from Ottawa at a particularly difficult period.

The contributions are invested by a Government agency, the Caisse de Dépôt, which now shows assets of more than \$1.5 billion. The Caisse, in the past two years of turbulence in the province, has been in effect underwriter of a large proportion of Quebec provincial and Quebec Hydro bond issues on the Canadian market. While both Government and Hydro have been able to place a fair proportion of the total new bond issues in the American institutional market, and to a small extent in Europe, the amount of the Canadian market issues being taken up by the big Toronto institutions has averaged only about 10 per cent.

The tremendous increase (from a low base in the Duplessis era) of provincial and Hydro debt in the first seven years of the past decade loaded Ontario institutional portfolios with Quebec issues till at one point the yield differential between Ontario and Quebec bonds rose to nearly 1 percentage point. But the real crunch came in 1968 and 1970, when federal policy made money extremely tight and expensive, capped finally by the terrorist troubles a year ago. In the past 18 months there have been several occasions when the Caisse de Dépôt had to take up complete issues of Quebec bonds in amounts of \$50m. and \$60m. at a time. The situation has eased now, but the Caisse's role is still important.

Every French-speaking Canadian in Quebec, it is often said, is one-third separatist in his heart, but he knows also that he has gained a great deal from Confederation, especially in the past decade. He would be happier if his Government could go a further step and get some say in the jealously-guarded federal fields of fiscal and monetary policy, which he feels bear down unjustly on a high unemployment area such as Quebec. He is impatient with Confederation, but he does not really wish to drop out as the declining membership of the Parti Québécois seems to indicate.

What Quebec wanted at the Victoria constitutional conference in June was the right to administer the whole social welfare field, whether the funds came from federal or provincial sources. Other provinces were more interested in repatriation of the constitution from Westminster. They were ready to leave Ottawa's rights in the social welfare field, as the Trudeau Government wanted in the package drawn up before the conference began.

### Inevitable

This package had been tacitly accepted by M. Bourassa, in advance talks with the Prime Minister, Mr. Trudeau. But M. Bourassa had neglected to do a selling job within his own Cabinet. He presented the package to his top Ministers shortly before the Victoria gathering, and it was clear that on again.

Quebec would not get the full social welfare rights that the Provincial Social Affairs Minister, M. Claude Castonguay, for one had insisted on. M. Castonguay threatened to resign. Thus at the meeting itself, Quebec's rejection of the package, the Victoria Charter, became inevitable.

Ottawa refused to grant the provinces (in effect Quebec's) primacy in the field of income security. In other words, Quebec wanted written into the constitution the right to say how all welfare funds, Federal as well as provincial, should be administered. Ottawa did not want to give up the right to see that its own welfare funds were used by the provinces to certain standards.

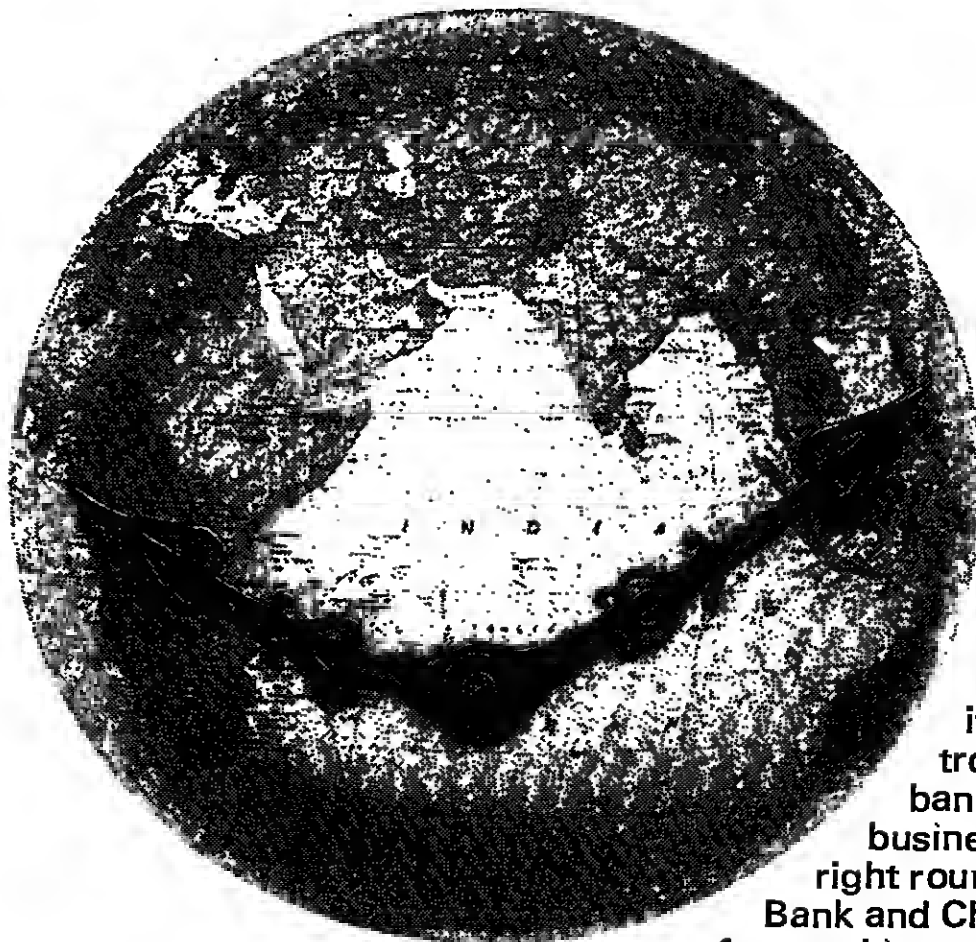
M. Bourassa now is trying to break the logjam by saying that Quebec should get the rights it seeks but without a specific amendment to the constitution (which would have ruled out future changes of course in Federal policy).

### Dialogue on

Quebec would determine how Federal family allowances, for instance, would be distributed in the province, accepting certain national standards as in the field of medical care insurance. The same method would be used for administration of Federal manpower and retraining funds. Amendments to Federal legislation for the moment would satisfy Quebec, and M. Castonguay could go ahead with his integrated income security programme designed to mesh Federal and provincial resources to meet the special needs of the province. M. Bourassa does not mind so much who sends out the cheques. But Quebec wants the right to say who will receive the cheques and how much. That is the crux. Some kind of constitutional change to enshrine the principles involved then could come later.

The ball has passed back to Ottawa. Quebec's Victoria refusal was never quite so final as the rest of Canada complained of. The dialogue is definitely on again.

## With business in two hemispheres you need a 24-hour bank



If your business is with countries as far apart as, for example, West Africa and the Philippines it saves you a lot of time and trouble if you can deal through one banking organisation that is open for business somewhere round the world, right round the clock. Ever since Standard Bank and Chartered Bank came together in one far-reaching group, every office of each has been a contact point for the services of the other and the global scope of both.

### Standard and Chartered Banking Group Limited

Constituent Banks:  
The Standard Bank Ltd., 10 Clements Lane, London EC4N 7AB  
The Chartered Bank, 38 Bishopsgate, London EC2N 4AH

# Southern Africa. Is it a case for using a 3-letter word?

It is! And the word to use is TAP. You know, of course, that TAP will fly you to Portugal. But we're equally ready to fly you to any of 7 destinations in Southern Africa. Fast and frequently.

way the Portuguese know how - like a guest. TAP: we're a touch short on syllables but decidedly long on service. And if you don't care to take our 3-letter word for it - ask your travel agent.

Portuguese Airways

TAP





## Export News

## BL tackles problems in Israel

By Our Own Correspondent

A DELEGATION of British Leyland Motors has arrived in Israel for an on-the-spot investigation of the financial difficulties of the Autocars Company which is jointly owned by Leyland and Yitshak Shubinsky of Haifa.

Autocars operates three plants—the Leyland Bus and Truck Chassis plant at Ashdod; a passenger car plant at Tirat Hacarmel near Haifa which turns out Triumphs and a locally designed range of fibreglass bodied cars powered by Triumph engines; and the so-called "Til" plant in Hifa intended for the production of parts for the other two plants.

Autocars' shortage of working capital stems from a number of difficulties including the acquisition of the Til plant at what is considered by many experts here at an excessive price.

Because of opposition by the workers Autocars has not yet achieved optimum division of operations between the Til and the nearby Tirat Hacarmel plant.

There has also been a lot of friction over the past two years between Leyland and Shubinsky and other shareholders in Autocars who have meanwhile been bought out.

In addition sales of passenger cars have not come up to expectations.

Finally the August 21 devaluation of the Israeli Pound has increased the import costs of the company.

## Dunlop backs radials for New specifications for the a grip on the U.S. market technical help brigade

BY MICHAEL CASSELL

DUNLOP announced yesterday that in the first eight months of this year the group's direct exports were up by 16 per cent. compared with the same period of 1970.

The good overseas record has been shared throughout the group and between January and August, export sales were valued at nearly \$31m. The company pointed out last night that this figure does not take into account the extensive indirect exports of components which are supplied to vehicle manufacturers and other industries whose products find considerable overseas markets.

## Hidden exports

These indirect exports, in fact, are estimated to have been worth between \$8m. and \$9m. in the first eight months of this year, about 11 per cent. up on the same period of 1970.

Exports by the company's tyre group are helping to offset the effects of the poor home market and are up by 16 per cent. overall. In particular, sales of radial tyres for both private and commercial vehicles are well up in the U.S., a major market. Dunlop is hoping that this surge in demand for its radial range forebodes a changing trend in the U.S., where the conventional cross-ply tyre has been dominant until now.

## Advantage

If the conversion to radial does take place on a major scale then the company says it is well placed to take advantage of the situation. Apart from the U.S., tyre exports are rising elsewhere, particularly to African countries. Results overseas for the floor coverings subsidiary, Dunlop Sinterex, are also encouraging. The company says that exports in the first eight months have risen by no less than 76 per cent.



Mr. J. Campbell Fraser

and sales have been particularly good in the U.S. and in the Far East and Africa.

The picture is the same for

the group's belting division, where total overseas sales up until August have increased by 60 per cent. compared with the first eight months of 1970. Sales have been running encouragingly high in Eastern Europe.

The general upwards trend for overseas sales has been increasing since the beginning of the year. After the first two months of 1971, exports were 5 per cent. above those for January and February of last year while after the first six months they had improved by 13 per cent.

## Cost reduction

Commenting on the export situation, Mr. J. Campbell Fraser, joint managing director of Dunlop, said last night that the group's overseas successes this year, coupled with its cost reduction programme, had helped to offset the slow growth rate currently being experienced in the U.K. market.

He added: "In tyre markets, the growing interest in radial tyres in the U.S. indicates a growing opportunity for Dunlop."

## Power-Gas lands record \$38m. American order

BY JOHN TRAFFORD

IN one of the biggest orders ever won by a British process plant contractor in the U.S., Wellman-Power-Gas, the Florida-based subsidiary of the Davy-Ashmore group, has been awarded a \$38m. contract to design and build a plant to make so-called substitute natural gas. The Gas Council's Catalytic Rich Gas process will be used.

The contract has been placed by Columbia LNG Corporation and covers a 250m. cubic feet a day gas plant to be built at Green Springs, near Toledo, Ohio. Completion is expected to take 18 months.

The recent spate of orders for substitute natural gas plants by U.S. energy suppliers underlines the growing shortage of natural gas from which the country is now suffering.

## Naphtha process

Fortunately for Britain, the Gas Council's CRG process, which converts liquid naphtha to a high energy gas, has proved a winner for making the substitute gas. Orders have already been placed with other contractors licensed directly or indirectly by the Gas Council for plants using the process.

Power-Gas began a study of various processes based on different feedstocks last year for Columbia LNG and came up with a

clear preference for the Gas Council process. Wellman-Power-Gas is engaged in other negotiations to secure more orders for the substitute natural gas plants in the U.S.

For the Columbia contract, Power-Gas will do the basic process design in the U.K. while its U.S. subsidiary will furnish the detailed engineering and design services, procurement, off-sites, construction and start-up.

Apart from gas plants, Power-Gas is now looking for a growing volume of U.S. business using Wellman-Power-Gas, only acquired last January, as the contracting vehicle for the various processes which Power-Gas has on offer.

About 40 per cent. of all chemical process plant investment available to the company is to be found in the North American market.

Oil companies have placed orders totalling \$33,000 for naphtha gas plants with Stone-Platt Crawley for light buoys or lights in the Gulf or for Libya. This is in addition to the \$30,000 contract already in hand for the United Arab Republic for light buoys and lights for the Port of Alexandria.

The installations involved are due to be wound up at the end of this year. The Shell offshore field at Qatar, the Shell Mex and BP single-point mooring buoys at Das Island, Arabian Gulf, and the extension to the Iranian Oil Services Terminal at Kargh Island off the Gulf Coast of Iran.

BY DAVID CURRY

TECHNICAL HELP TO EXPORTERS lives in one of those new buildings which depends on artists' impressions for its publicity because the reality is so grim. It occupies a new wing of the British Standards Institution complex at Hemel Hempstead. Opened at the end of September it cost £120,000, and the absence of lift shafts, cafeteria or toilets is due to the fact that it ran out of money £30,000 short.

Fortunately, the new departures being taken by THE show more originality than the building which houses it, despite the fact that both ultimately are dependent on Government money.

THE was set up by the Labour Government in the "export or die" mood that gave birth also to the British National Export Council. It started life with one engineer, and now it boasts 16 engineers and a staff of 43. From a budget of pocky money standards it now has £200,000 a year and with the optimism so endearing in those dependent on Government bounty it envisages handling about £2m. a year within 10 years.

## Commercial

Its function is basically the same as its founders intended. It collects, codifies and prints specifications for various items of manufacture demanded by overseas countries so that British goods enter a foreign market with the correct specifications.

It started off as a free service to exporters. When charges were introduced some 1,700 members paid £2 a year to receive the technical digests it produced. Now it expects to receive the first two hours' work of some 1,000 members paying £30 a year to receive the digests.

Non-members pay a hourly rate of £8.50 for work done in answering queries, and members have their inquiries answered free for the first two hours' work and then pay at a 25 per cent. discount for additional work. The minimum charge for an inquiry is £3.25.

This is the first change in THE. It is bound to be a commercial organisation and expects to cover some 25-30 per cent. of its expenditure from its own revenue.

The second change is the development of market research activity. It is pursuing a policy of building up other services to undertake projects either to identify a market or to complete specifications.

## International

It is, for example, looking at the possibility of doing work on the technical requirements for brake systems in Western Europe. It is linking up with a national body to undertake economic and technical research into the building standards of the enlarged Community. It recently published a market research study of the U.S. identifying where the concentrations of wealth and purchasing power and population were in America. A third change is the steady internationalisation of the service.



Mr. Gordon Gaddes and his files—waiting for the politicians to catch up.

For example, he continues, "we could do research into the regulations and practices relating to products exported from, say, Asia to Europe—children's clothes perhaps. We could produce a report on the technical requirements facing a country trying to sell processed products. We could help with training courses, we could help a nation build up its own advisory service."

This is still at the "ideas" stage. But it has recently been given impetus by the decision of the Commonwealth countries to broaden the scope of the Fund for Technical Assistance to include work on export promotion.

But, back on the home front, THE still has a number of challenges to face. In the first place its data still covers only an estimated 13 per cent. of U.K. visible exports, applying mainly to electrical goods, boilers and pressure vessels, gas equipment, and building and construction equipment. It is trying to include the motor vehicle field but has yet to embark on work in, for example, textiles, pharmaceuticals and foodstuffs.

In addition, it is in danger of taking on a too heavy workload for its resources already. It updates its digests every six months. As its list of publications grows, so the resources devoted to updating this rather than doing original work gets

greater. This has not happened yet; but THE can see it coming. There is a final field into which Gaddes sees THE moving: the environment. It is already thinking of introducing sections dealing with noise and machinery safety. It could become something of an anti-pollution watchdog.

What happens in THE in the immediate future will depend to some extent on what shape the British Export Board finally takes. It is beginning to look as if the Board will exercise some nominal patronism over the various Government export-sponsoring agencies. But it also looks as if it may well allow the various bodies promoting exports to remain more independent than the pessimists believed when the news of the Civil Service character of the Board was revealed.

THE has something of a protector in the British Standards Institution. Most of its work is, after all, dealing with standards, and the most prolific of its contacts are overseas standards bodies. Besides which it is building up its own revenues and moving in the commercial direction indicated by the present Government.

It seems likely, then, that THE will simply establish diplomatic relations with the Board but remain practically independent. Indeed, if its diplomacy is particularly good, it might even get £30,000 to finish off its building.

## EUROPEAN COMPANY INFORMATION

Over 50 years of analytical experience have gone into our European "know-how." To-day this expertise covers nearly 300 of the most significant Companies on the Continent.

Subsidiary Companies—brand names—capital structure—10 year accounts analysis AND just when you need it most that vital piece of late news—all on ONE up-dated European Service Card.

The cost? Just £75 a year.

Extel Statistical Services Ltd., 37/45, Paul Street, London, EC2A 4PB. Tel: 01-251 0681.

## Shipbuilding Board manual on accounting published

BY JAMES McDONALD, SHIPPING CORRESPONDENT

THE Shipbuilding Industry Board, due to be wound up at the end of this year, has published a manual on Accounting and Reporting for Managers in Shipbuilding, which should be required reading for management at all levels in Britain's remaining shipyards.

The 200-page book, in its introduction, says that the "ideas outlined are based on well-established techniques which have been tried and accepted by most types of industry for many years."

They have, obviously, not been accepted by the British shipbuilding industry in the past, although Sir William Swallow, chairman of the Board, explained yesterday that until a few years ago, with most of the work actually done on the berth, it was extremely difficult to measure work in progress.

With the growth in building in sections or sub-sections of a ship away from the berth, the task of management in measuring the work done had become easier. The berth had become the assembly point.

The book was a direct result of the recommendations of the

Geddes Report on shipbuilding some years ago. Sir William said at a Press conference in London yesterday.

"Accounting and reporting to management is something I have valued in my own industrial career. I strongly recommend this book to all shipbuilding managers striving to retain or increase their share of world shipbuilding," said Sir William.

## Study groups

The background to the book is that in 1968 the finance directors from five leading U.K. yards formed a group under the chairmanship of Mr. A. S. Ashton—a member of the SIB and now Board member for finance and corporate planning at the Post Office.

The group, aware of growing competition and reducing margins in contracts, set out to consider ways to improve the standard of cost accounting and reporting in their companies to combat the threat to future profitability.

Price Waterhouse Associates, as management consultant, was

asked to review the existing position in the U.K. yards and then to make recommendations for raising the standards of cost accounting and reporting in the industry. Study groups were formed and the book—prepared by Price Waterhouse—is the result of these combined efforts.

The book will be circulated free to British shipbuilders and management, but is also available to foreign yards—at £5 per copy. It says the group of finance directors comprised: Upper Clyde Shipbuilders, Harland and Wolff, Scott Lithgow, Swan Hunter, Cammell Laird and the Shipbuilders and Repairers' National Association.

Mr. Ashton, at the Press conference yesterday, said the book was about how to spend money and use resources wisely. It was more than a management accounting book, it dealt with a management information system, based at the top in a five-year forecast programme and working down through management in perhaps the most important level in which forecasts could be made, measurement of work done.

The five-year forecast recommended by top management was dependent on an accurate measurement of work done, an important element in shipbuilding where there was a number of relatively small companies making relatively few large units in any year.

Mr. Ashton stressed that unless there was a reliable way of measuring the progress of work, all the firms suggested in the book and management "targets" would become ineffective.

The book's proposals were not just normal accountancy practice but needed a new co-operative effort. The suggestions need a great deal of patience and explaining at all levels.

Mr. H. A. Butt, of Price Waterhouse, declared that there was nothing particularly new about the accounting and reporting techniques recommended. But the book had a separate section dealing with control of cash flow, possibly needing emphasis in view of this particular problem of shipbuilding in recent years.

## High blood pressure: 'Let patient decide'

BY DAVID FISHLOCK, SCIENCE EDITOR

A NEW KIND of relationship between doctor and patient is proposed in the case of high blood pressure, in a report published to-day.

It suggests the general practitioner might approach the problem by explaining just what are the risks attaching to his patient's blood pressure level, and the benefits and drawbacks of treatment.

The patient himself would be left to decide, before or after trying the treatment, whether the side-effects of treatment were acceptable.

The situation arises, says the report (Hypertension—A suitable case for treatment?), because of the direct statistical relationship between blood pressure and expectation of life.

Hypertension is a disease of a kind hitherto unknown in medicine, where moderately high blood pressures, even when free from symptoms, could cut

more than 10 years off the expectation of life of a middle-aged man.

New medicines developed over the last decade could reduce hypertension, and had a proven effect in reducing the number of early deaths, especially from strokes. But it would not be justified, the report concludes, to start a national or regional screening programme on the grounds that treatment would release compensating resources elsewhere in the Health Service.

In 1968, the Health Service spent £11.7m. on anti-hypertensive drug therapy, treating about 2 per cent. of those aged between 35-74. A screening programme would raise the figure to about 5 per cent. Known to have moderate-to-high blood pressure, more than doubling the cost of the treatment.

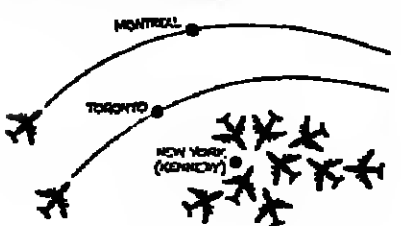
Hypertension—A suitable case for treatment? Office of Health Economics, 162, Regent Street, London, W1R 6DD, 15p.

## The Jambusters

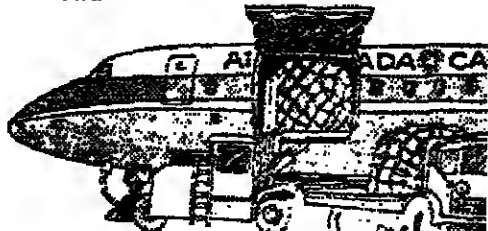
Air Canada ships goods from the U.S.A. via Toronto or Montreal. Beats the congestion (and pilferage) at New York.

There is nothing more annoying than for vital imports to be held up en route due to the congestion at Kennedy Airport, New York.

The answer? Fly your goods Air Canada and they'll leave the U.S.A. via Toronto or Montreal, swiftly, efficiently and without the problem of pilferage.



Air Canada can fly your imports from 42 cities in North America—that's more than any other transatlantic airline. And there are services from 60 other U.S. cities



## AIR CANADA CARGO

London: 01-750 4751 - Glasgow: 01-222 78822  
Manchester: 051-236 8882/3 - Birmingham: 021-643 1624/5  
Leeds: 20628

## Rolls-Royce distributors and retailers.

- Barnet**  
●Haley Greco Garage Ltd., 202/4 High Street, 01-449 0332
- Belfast**  
●Stanley Harvey & Co. Ltd., 4 Clarence St. West, 0232 41057
- Birmingham**  
●J. Evans Limited, 100 Broad Street, 021-643 2911
- Bournemouth**  
●H. P. Arnes & Son, 41/43 Poole Hill, (0202) 25748 (Day & Night)
- Brighton**  
●Moore of Brighton (1924) Ltd., Russell Square, 0273 26014
- Cardiff**  
●Hewell's Garage (Cardiff) Ltd., 501 Newport Road, 0222 35591
- Cheltenham**  
●H. P. Broughoo & Co. Ltd., High Street, 0242 55374
- Colwyn Bay**  
●Braid Bros. Ltd., Abergele Road, 0492 2264
- Doncaster**  
●Mann Egerton & Co. Ltd., London Road, 0332 47471
- Eastbourne**  
●Caffyns Ltd., Meads Road, Eastbourne 30201
- Edinburgh**  
●Rossleigh Limited, 65 Springhill Avenue, 041-423 5011
- Gloucester**  
●Wadham-Stringer (Gloucester) Ltd., Woodbridge Road, 0483 69231
- Halesowen**  
●Newbury Motors Limited, Moor Lane, 021-550 1641 (7 lines)
- Ilkley**  
●Ross Bros. (Ben Rhydding) Ltd., Ilkley 3431
- Leeds**  
●Appleyard Rippon Limited, Roseville Road, 0532 52731
- Lincoln**  
●J. R. J. Mansbridge, Rumbold Street, Lincoln 27117
- Liverpool**  
●Oliver Rix Garage, Hamilton St., Birkenhead, 051-647 8114
- London**  
●Jack Barclay Ltd., Berkeley Square, W.1. 01-629 7444  
●H.A. Fox & Co. Ltd., 34 Dover Street, W.1. 01-499 8962  
●Hooper Motor Services Limited, Kimberley Rd., N.W.6. 01-624 8833  
●Kenning Car Mart Limited, 12 Berkeley Street, W.1. 01-499 3434  
●Mann Egerton & Co. Ltd., 14 Berkeley St., W.1. 01-499 8342
- Manchester**  
●H. R. Owen Ltd., 17 Berkeley Street, Mayfair, W.1. 01-629 9060
- Maidenhead**  
●Mead of Maidenhead Limited, 34 Market Street, Maidenhead 25371
- Manchester**  
●Mead Cockshoot Ltd., Great Ducy Street, 061-834 5007
- Market Weighton**  
●Robert B. Massey & Co. Ltd., High Street, Market Weighton, York. Market Weighton 2361
- Newcastle-upon-Tyne**  
●Rossleigh Limited, 100 North Street, 0232 28981
- Northampton**  
●Grove Weston Ltd., Wellington Road, 0604 41141
- Norwich**  
●Mann Egerton & Co. Ltd., 5 Prince of Wales Road, 0603 28383
- Nottingham**  
●Mann Egerton & Co. Ltd., Huntingdon Street, 0602 53881
- Oxford**  
●J. D. Barclay Limited, Barclay House, 250 Baboury Road, Oxford 59944/9
- Peterborough**  
●Gressick's Garage Ltd., 50-56 Leonard Street, Peter 25481
- Peterborough**  
●Mann Egerton & Co. Ltd., 100 North Street, 0232 28981
- Plymouth**  
●W. Mumford Ltd., Murley Plain, 0752 62126
- Preston**  
●Lambhams Garage (Preston) Ltd., Corporation Street, Preston 54242
- St. Albans**  
●W. M. Cooper Ltd., Catherine Street, St. Albans 54344
- Salisbury**  
●Henty (Worcester) Limited, Southampton Road, 0722 5251
- Sheffield**  
●Kennings Limited, Peel Street, 0742 65266
- Southend-on-Sea**  
●Southern Motor & Aero Co. Ltd., Sailfin Road, Thurpe Bay, Southend 82334
- Stoke-on-Trent**  
●Byrnes of Fenton Limited, Victoria Road, Fenton, 0801 48111
- Weybridge**  
●Mead of Weybridge Limited, 105 Queens Road, Weybridge 49221
- Wolverhampton**  
●H. R. Atwood Ltd., Penn Road, 0902 27897
- Many Rolls-Royce**  
●Dealers (indicated) and Retailers have other branches throughout the U.K. each of which is staffed by Rolls-Royce specialists.





## European News

### Tito is to visit London

By Michael Simmons, European Correspondent

PRESIDENT TITO of Yugoslavia is to visit London soon for talks with British Government leaders. The precise date has yet to be set, but it could be as soon as the end of this month.

This visit is expected to take place on President Tito's return from Washington, where he is scheduled to have talks with President Nixon. This visit has been on the table ever since President Nixon was in Yugoslavia last year.

No specific issues have yet been drawn up by the British side for discussion with the Yugoslav leader (who was last here in 1956), but it is expected that he will be given very cordial treatment by the Prime Minister and the Foreign Secretary, Mr. James Callaghan.

On a bilateral level there will be talks about the Yugoslav investment in the headquarters of the Yugoslav Investment Corporation, an organisation which assists in the working of the 1967 investment laws allowing Western firms to have substantial holdings in co-operative ventures with Yugoslav enterprises.

In addition, the Yugoslavs have had some negotiations with interested British companies about the possibilities of buying defence equipment in this country, and this too may be subject for discussion.

Finally, there may well be some gentle support by the British on President Tito's relationship with Moscow—explored by him when Mr. Leonid Brezhnev, the Soviet leader, was in Belgrade last month.

### OECD talks on environment

By Robert Mauthner

PARIS, Oct. 12. MINISTERS of Science of the Organisation for Economic Co-operation and Development (OECD) will meet here on Wednesday and Thursday to discuss how to improve the co-ordination of science and technological policies with social, health and environmental policies.

## Britain and Six agree to swap nuclear secrets

By REGINALD DALE, COMMON MARKET CORRESPONDENT

BRUSSELS, Oct. 12.

BRITAIN and the Six today completed arrangements for an exchange of nuclear secrets when the U.K. joins Euratom, the third European Community alongside the Common Market and the European Coal and Steel Community on January 1, 1973.

Under the agreement, registered at today's session of the entry negotiations at deputy level, the U.K. will hand over information on its operating experience with non-military nuclear reactors and basic research into scientific and civil engineering subjects in the nuclear field.

There will be no question, however, of handing over defence secrets or information of a high commercial value. The Government has not needed to consult Washington over the know-how deal, as no nuclear information acquired from the U.S. is involved.

In return, the U.K. will gain access to the information accumulated inside Euratom in its 13 years of somewhat precarious existence as well as to its capital assets which are estimated at something over £100m. Britain, as agreed at an earlier stage in the entry talks, will not be

required to pay a financial "entry fee" into the Six's nuclear community and the Six today expressed themselves satisfied with the type of information the U.K. was offering instead.

### Formula

The British team also renewed its request today for a three year transitional period before applying the Community's common system of export credit guarantees, which is still being worked out. The U.K. negotiators said that such a period would be needed so as not to discriminate amongst British exporters who held short-term three year contracts with the EC.

The British delegation accepted a formula for multilateral consultations with the Six over negotiations with the EFTA countries that have not asked for full membership of the Community. The U.K. agreed to study a proposal by the Six under which the Court of Justice of the enlarged Community would have 11 judges and three advocates general—leaving the European Investment Bank the last of the Community's organs.

atmos on which the Six have still to complete institutional proposals.

A number of other technical questions were discussed at today's meeting, including methods of grading fruit and vegetables, to which the U.K. undertook to conform with Community regulations within two years after becoming a member.

The next meeting of the negotiations at deputy level is now set for October 26, and today the U.K. asked for an extra session on November 3 to prepare the Ministerial meeting on November 9.

### MORE DISMISSALS IN W. GERMANY

By REGINALD DALE, COMMON MARKET CORRESPONDENT

THE FEDERAL Labour Office said 73 factories employing about 14,000 may be shut down in West Germany before the end of this year. A further 81 plants employing more than 100,000 may dismiss a total of 7,200 employees in the period.

There may also be 77,000 on short-time working in the final quarter against 38,500 in September, the office said. Reuter

## Six limit investment incentives

By REGINALD DALE

THE SIX Common Market countries have for the first time agreed to a cease-fire in the battle to attract new investment to their national territories by offering ever increasing incentives to potential investors. The plan is to be formally adopted when the Council of Ministers meets to discuss regional policy in Luxembourg next week.

In a decision that will directly concern Britain when it joins the Community, the Six have agreed to limit investment incentives to the equivalent of 20 per cent. of the total cost of the investment in the so-called "central area" of the Community. The "central area" broadly covers the zones of the Common Market where industrialisation is already advanced.

### Transitional period

The 20 per cent. limit is due to come into force from January 1 for a transitional period of one year. During the following year the working of the scheme will be reviewed and the level of the "ceiling" on incentives could be revised at the end of 1973.

During the transitional period, the Six will have to make their aids to investment increasingly "transparent"—that is to say, they must start to reveal the existence of subsidies that are not at present publicly divulged. There is to be an annual report

by the commission on the operation of the scheme.

The possibility of exceptions to the 20 per cent. limit is retained, provided member states furnish the Commission with sufficient justification in advance. It has also been agreed that the limit is not to be set for all time, although the intention is to decrease it rather than raise it.

The "central zone," to which the limit will apply, is defined as the whole of the Community with the following exceptions: The South of Italy, those parts of France now qualifying for development aid (over half of France's total area), West Germany's 40-kilometre wide border zone with East Germany, and Berlin.

But the regulation says that this does not necessarily mean that investment subsidies of up to 20 per cent. can be justified in every part of the "central area," and regional aids must not be allowed to cover the whole of the territory of a member state (except for Luxembourg).

The level of the percentage "ceiling" in future must be set to take adequate account of the needs of industry in the central area, according to the document agreed by the Six. Account must also be taken of the effects on individual industrial sectors of

the blanket 20 per cent. limit. For Britain, the key question will be how the "central area" of the enlarged Community is defined so as to extend the limits on incentives to areas of the U.K. This will have to be the subject of negotiation at a later stage. The issue is also of crucial importance to two of the other candidates for Community membership, Ireland and Norway.

### FRENCH PRICE LIMITS AGREED

By Adrian Dicks

PARIS, Oct. 12.

CONTRACTS for voluntary limitation of industrial prices during the next six months have been signed between the French Finance Ministry and representatives of the chemicals, wool, shoe manufacturing and electrical appliances employers' associations.

These are the first four sectors actually to have agreed with the Government on details of how to limit prices to an overall 1.5 per cent. increase during the period September 15-March 15. This was the limit agreed between the Government and the Patronat (the overall French employers' organisation) last month. A total of 2,500 companies with a combined turnover of Frs31,000m. (£2,400m.) are involved.

## Nixon visit seen by Moscow as trump card

By Our Own Correspondent

MOSCOW, Oct. 12.

The Soviet invitation to President Nixon is seen here as the final trump card in the diplomatic game the Russians have been playing during the last year. Until now the U.S. appeared the main country to have been omitted in the Kremlin plan although bilateral negotiations between the two States have been steadily progressing to the SALT talks.

It is of particular importance for the Soviet Union that President Nixon's visit, due to take place in the second half of May, should follow fairly soon after his visit to Peking. The silence with which the announcement of his visit to China was met in Moscow indicated that the Soviet Union was unprepared for a Sino-American dialogue.

The Soviet Press and although much of this was thought to be propaganda for domestic consumption, it indicated that the Soviet Union had qualms about a possible Sino-American rapprochement. It was shortly after the announcement of President Nixon's visit that the Soviet leaders accepted invitations from Canada, France and other countries.

The Soviet announcement broadcast over Moscow Radio this evening stated that "the leaders of the Soviet Union and President Nixon will examine all principal questions with a view to further improving bilateral relations between their countries and strengthening the prospects of universal peace." The involvement of the two countries in Vietnam and the Middle East and their mutual interest in working towards a peace keeping solution and reduction of forces in Europe indicate the possible scope for the talks in Moscow.

### Romanian visit to Malta

By REGINALD DALE, COMMON MARKET CORRESPONDENT

VALLETTA, Oct. 12.

A HIGH POWERED Romanian government mission, headed by Oil Minister Dr. Bucur Almasan, arrived here this afternoon to discuss with Premier Dom Mintoff "projects which are of help to Malta."

The six-man delegation, which includes Foreign Trade Director General Vassily Mandulescu, and Soviet Affairs Director-General Dimitry Mihail

## NORWAY'S LOCAL ELECTIONS

# Feminine conspiracy

BY OUR OSLO CORRESPONDENT

NORWAY'S women voters pulled off a petticoat coup in last month's local elections. Through carefully co-ordinated — but strictly legal — manipulation of the lists of candidates, dedicated groups of women all over Norway ensured that an unprecedented number of their own sex will be holding office on town and county councils throughout the country over the next four years.

The extent of their success has surprised the women themselves, and left many Norwegian men rubbing their eyes in disbelief. Oslo's town council, for instance, now has 48 women members and 37 men, compared to 22 to 63 previously. In Trondheim, 46 of the town's 85 councillors are women. Women won a majority (27 to 20) on the council of Ask, one of Oslo's dormitory suburbs, and came close to it in another, Baerum, where they increased their representation from 13 to 27, on a council of 57.

These were the most sensational victories, but from all around the country there are reports of smaller triumphs—doubling and tripling the number of women on local councils which up to now have been heavily dominated by men. One women's organisation estimates that the 1971 elections have resulted in a 50 per cent. increase in the number of women holding local office in Norway.

These results were achieved by exploiting a quirk in Norway's proportional representation system of voting. In local elections, Norwegian voters for lists of candidates, drawn up by the various local parties, and numbered according to each party's estimate of the candidates' importance. This is to ensure that if a party wins only a few seats in a council, those seats will go to the men and women highest on its list. If a particular candidate is considered important, the party can print his name twice on its list, and every vote for that list will be two votes for

him. This is a technique called "cumulation."

The lists contain at least as many names as there are seats on the council, but since no party expects to sweep the board, the names at the bottom are just padding, as far as the party is concerned. In the past male candidates have dominated the top, and most often been "cumulated"; women candidates were often at the bottom of the list.

### Campaign

Through the lists are drawn up by the local parties, no voter is obliged to accept them as they are. The voter can cross off some names and add others (including candidates from other lists), alter the numerical order of the candidates, and "cumulate" or double up favourites. If he wants, he can submit a handwritten list of his own.

Because of the way the system works, a coordinated campaign of crossing off and cumulating can have a disproportionately large effect on the election result. This was dramatically demonstrated in the 1967 local elections, when 17 out of 5,500 voters in one district wrote in and "cumulated" women candidates on their lists, crossing off all the men, and succeeded in acting 14 women onto a council of 57 members.

This result caught the eye of feminists all around Norway, and quiet preparations were made to do the same thing this year, on a nationwide scale. Experts on Norway's election laws were invited to lecture women's clubs and housewives' circles, on the exact techniques to be followed. A wrongly altered list would be declared invalid, so the changes had to be carefully made.

Obviously, the lesson was well learnt. In the privacy of the polling booths, they set about crossing off and adding names

until the official lists were unrecognisable. A keen Conservative feminist, for instance, would take her party's list and cross off all the men. Then she would double up the names of all the women on the list, and fill in the remaining spaces with the names of women from the other parties' lists. In the past, Labour, even Communist. This election, the important thing was their sex.

From county after county, election officials reported a record number of corrected lists. The many corrections complicated the job of counting the vote, and in many places the final results were not known until more than a week after the election.

When the success of the "coup" became clear, male reactions varied widely, from outraged horror to understanding and even enthusiasm. Few of the men would admit they were opposed in principle to more women in local politics; they said they just disliked the way it had been done this time. "Undemocratic trickery," as an expression often used. The women rejoined that by altering the party lists they had merely exercised their democratic right to choose their own representatives, instead of letting the parties choose for them.

### Disillusionment

An Oslo business newspaper with a largely male readership said the coup reflected women's disillusionment with the different party machines, as well as a growing indifference to party ideologies. The various (male) party leaders had not kept their many promises to give women more of the important jobs in the party hierarchy—and now the women had taken matters into their own hands. "It may be high time to consider whether there is something wrong with the parties, and with the politicians' words and deeds," the paper commented.

## Kreisky to go it alone

VIENNA, Oct. 12.

CHANCELLOR Kreisky was today authorised by the Socialist Party leadership to form once again an all-Socialist government regardless of the outcome of the postal vote counting which is likely to cut his strength in the newly-elected Parliament from 183 to 92 seats out of a total of 183. As one Socialist MP is to become the non-voting Speaker, Chancellor Kreisky's party will in fact have only 91 MPs, that is exactly half of the voting members.

Thus, though the Socialists won the greatest electoral victory in post-war Austrian history on Sunday, they will have to seek outside support from individual

members of the opposition or from one of the two opposition parties.

On the other hand, the Socialist government can no longer be overthrown through a vote of no confidence nor can it be forced to carry out bills voted by the opposition as happened for example during the 18 months long reign of Chancellor Kreisky's minority cabinet.

Dr. Kreisky said that there will be no change in the composition of the present government, which presumably means that Foreign Minister Rudolf Kirchschläger, a non-Socialist career diplomat, will also retain his post.

## REVISED GREEK PRESS LAW

ATHENS, Oct. 12.

CREECE'S army-backed Government today published a Press law which considerably tones down original proposals following strong opposition from journalists and publishers. The law will go into effect on November 1 and regulates the professional status and conduct of both Greek and foreign journalists.

In its original form the law, to be known as the Code of Ethics for Journalists, laid down that journalists should take the interests of Greece and of the Greek people as their guide. The law published in the Official Gazette today provides that journalists should report accurately and carefully

...I did the trip from Brussels to Monaco in one day, actually starting as late as 11 am. It felt strange speeding down the Autoroute at 110 mph with no noise coming from the engine or road and the air conditioning keeping the temperature inside the car perfect. On reaching Monte, one impression of the Silver Shadow was dominant. I was fresh, relaxed, and not in the least tired—a remarkable tribute to the car after having driven over 700 miles. ... Paul here is the distinguished Belgian racing driver and journalist.

The best car in the world.

Rolls-Royce Motors Limited. Makers of the Rolls-Royce Silver Shadow and Bentley Four-Door Saloon, the Rolls-Royce Silver Shadow Long Wheelbase Saloon, the Rolls-Royce and Bentley Corniche Two-door Saloon and Convertible and the Rolls-Royce Phantom VI.





## There are times when only The Times will do

This month one of the most important debates in modern British history draws to a close.

After fierce discussion at both party conferences in Brighton, Parliament will accept or reject the negotiated terms for our entry into the European Economic Community.

The decision is vital to the economic and political future of the country; and the fullest

reports of how and why it is arrived at are of consequence to us all.

And The Times, accepted at moments such as these to be a unique and indispensable source of information, will in these coming weeks—with the widest coverage of all events germane to this issue—offer incomparable value.

**When The Times speaks, the world listens.**

Brighton

& Westminster October 1971

## The dispute over textiles

The Japanese Government this week is expected to announce formal restriction on textile exports to the U.S., and there is a fear that Japan will now increase its textile shipments to Western Europe in general and to Britain in particular. JOHN TRAFFORD reports

BY THE week-end, the present battle between the U.S. and Japan about textiles will be over, even if the war seems certain to drag on. By then we shall know if Mr. David Kennedy, President Nixon's roving ambassador, has offered even a twig of an olive branch to sweeten American demands for a regime of export limitation tightly controlled by the reluctant Japanese Government.

Apart from the central question of yen revaluation, there is probably no topic which stirs deeper emotions in Washington and Tokyo than textiles. Although the dispute concerns only the two countries at present, British manufacturers are becoming increasingly worried that they will become embroiled.

The fear, expressed recently for the whole of industry by Mr. Campbell Adamson, director-general of the CBI, and reiterated by Lord Stokes for the motor trade, is that Japan may well step up its exports to Western Europe in general and Britain in particular if a home cannot be found for them in North America.

Japanese interest in the European textile market has been growing for some time. A Japanese acrylic fibre producer and trader recently set up a joint spinning mill in Portugal with local interests, and the Japanese textile Press has devoted generous column inches to the opportunities awaiting the adventurous exporter in Europe.

At present, the trade emphasis is very much with the U.S., which accounted for \$600m. or about 25 per cent. of last year's \$2,323m. Japanese exports of yarns, fabrics and made-up goods. Western Europe only bought \$162m., less than 10 per cent. of the total, and the U.K. was well down the list with no more than \$20m. worth of imports.

At present, the trade emphasis is very much with the U.S., which accounted for \$600m. or about 25 per cent. of last year's \$2,323m. Japanese exports of yarns, fabrics and made-up goods. Western Europe only bought \$162m., less than 10 per cent. of the total, and the U.K. was well down the list with no more than \$20m. worth of imports.

On the face of it, talk of a threat from Japanese textiles is simply alarmist. Nevertheless, many industrialists know that it does not take a large volume of low-priced imports to disrupt the home market.

In essence the problem is to assess the magnitude of the restrictions being placed on Japanese exports to the U.S., to gauge Japan's ability to divert these goods to Western Europe, and to map out the most effective response for British manufacturers and the Government.

As regards the present dialogue between the Japanese and the Americans, the outlook is bleak. At the beginning of July, the Japanese textile industry agreed on a policy of voluntary restraint in exports to the U.S. so as to avoid a government-imposed scheme. But President Nixon's import surcharge, announced on August 15, destroyed the grudging goodwill under which the policy was being operated and there was talk that it would be abandoned.

Last week despite strong opposition from the Japan Textile Federation, which speaks for 23 trade associations, the Japanese Government agreed to fall in with an American demand to introduce export controls by Japanese textile firms by quota. Three October 15. Mr. Eisaku Sato, the



A Toyo Spinning Company plant.

Prime Minister, made it plain that he was doing this because the alternative—mandatory U.S. quotas—would be even more harmful. The plan is expected to impose severe category-by-category curbs on the main man-made fibre and wool textile items, as well as an overall ceiling. The only area to escape will be cotton goods which are covered under GATT rules by a bilateral agreement.

Export restraint to the U.S. coupled with the almost certain revaluation of the Yen will make it tough for Japanese textiles to compete on the American market, but some stability at the retail price level may be obtained by shaving the margins earned by the U.S. on Japanese goods. Recently the Japanese Minister of Finance said that many of the country's goods were sold in the U.S. at prices three times their FOB value and that there was plenty of scope for remaining competitive. In the textile industry, however, small and medium sized companies will certainly be hit.

Quite apart from the formal impediments to trade, the fact remains that the U.S. is a much more attractive market to the Japanese than is Western Europe. A crucial factor here is wage costs: at around \$1,600 a head, Japan's per capita income is now about the same as the U.K. and the more industrialised countries of Western Europe. However, it is still a long way behind America.

Thus, to the Americans, Japan is still a relatively low cost country, with all that that means in terms of competitiveness. To Western Europe, on the other hand, Japan is now an equal and must look to more advanced production or marketing techniques. Japan's declining competitiveness in the labour intensive sectors of the textile industry such as clothing is causing its industrialists to do some very radical thinking. Already moves are afoot to set up affiliates in the low wage cost countries, notably South Korea and Taiwan. At the same time, the Japanese Textile Import Association has come out in favour of the principle of importing goods with a high labour content from the low wage countries.

The Japanese Government, too, is behind this move to recognise the inherent lack of competitiveness in the labour intensive sectors. Upvaluing the Yen will only underscore this and make the need for radical recasting of the Japanese industry all the more urgent. In short, if the American market is denied to

Japanese textile companies, many of them will go to the wall rather than to Western Europe for the simple reason that the wall is the only place left.

The problems facing Japan are to be found to a lesser extent in Hong Kong and again to a lesser extent in South Korea and Taiwan. The U.S. Government is pressing each country to restrict its textile exports to America. The Hong Kong Government has already offered a comprehensive restraint programme on all textiles covered by the existing Long Term Arrangement on cotton goods.

The effect on Europe will depend on whether the Americans finally agree on deals which do not specify quotas too tightly by category (which inevitably stifles the growth sector) and which allow reasonable growth over the years. If their hands are forced, each of the three countries will find it possible to compete more actively in Western Europe up to the limit of any restrictions placed on their trade since in all three cases their labour costs are well below anything found in the U.K. or the EEC.

Even if the threat from a flood of Japanese textiles is not very great, two points emerge from the present ferment in the international textile trade.

The first is that the Long Term Arrangement, which was established by GATT in 1922 to help the predominantly cotton based textile industries in the poor countries gain orderly access to the industrialised markets, is now hopelessly out-of-date. Much of today's trade and most of the growth in man-made fibres and fabrics. At present there are no ground rules covering these.

For some years there has been growing pressure for talks to begin on new GATT rules geared to the changes in technology and fashion to come into operation when the present LTA expires in November, 1973. A start will have to be made soon if anything at all is to be achieved.

**Cheap labour**

The second point is that some progressive British companies are thinking along the same lines as the Japanese. In areas where labour is a major cost item and the goods are of the high volume low value variety requiring little technical expertise, they see a strong argument in favour of setting up manufacturing operations abroad in the cheap labour countries and closing down some of their U.K. mills.

The resulting social problems, at the present time of high unemployment, will be a powerful deterrent to such a course. But the fact remains that, with diminishing protections from imports, the British textile industry is increasingly obliged to concentrate on those activities where it has a decided advantage over the cheap importer.

Next January, the present protective import quotas on cotton goods imported duty-free from Commonwealth countries, particularly Hong Kong and India, are being replaced by modest tariffs. Quotas apply only to dutiable non-Commonwealth cotton goods and are also being lifted. By themselves the tariffs will not cancel out the whole of the cost advantage enjoyed by the low wage countries, but they should aid home market stability and long-range planning, and remove the anomalous distinction between cotton and man-made fibre textiles. The dual effect of U.S. textile protectionism and the abolition of U.K. quotas will soon be putting the traditional cotton industry to the test.

**THE BIG JANUARY SAIL**  
*'France' for New York-Jan. 5*  
On January 5 'France' sets sail from Southampton to New York. An exceptional winter sailing—the first leg of her great World Cruise. Enjoy a 4½ day glimpse of this unique occasion from £121—one class. Feel all at sea and like it. See your travel agent or contact French Line.  
**French Line**  
20 COCKSPUR STREET, LONDON SW1. TEL: 01-839 9040

**Capital for business**  
British Bank of Commerce Limited have now made arrangements whereby they are able to consider FIXED TERM MORTGAGES on which only the interest is payable during the life of the loan for periods up to 15 years and for amounts of £50,000 and over. These mortgages can be granted against the security of office, shop and industrial property.  
Apply in writing to: British Bank of Commerce Ltd., 145 West Regent Street, Glasgow G2.  
A British Bank of Commerce service

## BOAC presents: How to go half-way round the world without going right round the bend.



1. Go aboard BOAC 747. Note incredible amount of space. Wide seats. More legroom. Broad gangways. High ceiling. Huge overhead lockers that get luggage from under feet.

2. Recline your seat. Move adjustable headrest to most comfortable position and don headphones. Tune in to one of 3 stereo and 4 mono channels of restful music.\*



3. While cruising over the Middle East, settle back and enjoy a good film\*—like 'Aristocats', or 'Madigan's Millions'. Later liven up the Hong Kong-to-Darwin hop with another like 'The Million Dollar Duck', or Julie Christie in 'The Go-Between'.





## Other Overseas News

### Steam past to mark end of Far East Command

By Our Own Correspondent

SINGAPORE, Oct. 12. A FAREWELL parade and naval team past will mark the winding up of Far East Command later this month, and the end of Britain's role in the defence of Malaysia and Singapore. And the new ANZUK force is meanwhile gearing itself to take over the Three Power Commonwealth defence in the area.

The final parade of Far East Command has been set for October 29. The British Far East Commander-in-Chief, Air Marshal Sir Brian Burnett, together with his land, sea and air force Far East commanders will depart for England on November 1.

By then the joint ANZUK Tri-service Force under the overall command of Australian Rear Admiral David Wells will be in existence. The Five Power integrated air defence system under an Australian Air Vice Marshal is already in being and will take over responsibility for defence from the Far East Force on November 1. But the Far East Command will continue to exist until November 1, responsible for the defence of Malaysia and Singapore, no such function evolves on the ANZUK force. Under the Five Power arrangements signed in London last April it will be used for the defence of the Commonwealth countries.

The final Far East Command parade will be held at the huge naval base in Singapore. But the base, built by Britain between the two world wars, will not be closing down. Several sections of it will be used by the ANZUK force, and the ANZUK command HQ will be there too.

### Australia China mission report

By Our Own Correspondent

CANBERRA, Oct. 12. THE AUSTRALIAN Government is planning to send an official trade mission to China, according to the leader of the opposition, Mr. Whitlam, today. Mr. Whitlam said his belief was based on private information upon which he could not expand for the present.

The Prime Minister, Mr. McMahon, and Trade Minister, Mr. Anthony, refused to confirm or deny the suggestion. Mr. Anthony hedged by saying he hoped more Australian businessmen than the 100 who attended last time would go to the Canton Trade Fair starting next week.

He said trade was one of the areas the Australian Government hoped to explore in the dialogue it was keen to open with Peking.

● MATSUHITA ELECTRIC INDUSTRIAL net earnings fell to ¥90.1m. (equal to 7.3 cents a share) in half-year ended May 20, from ¥105m. (11.5 cents) on sales of ¥1,215m. against ¥1,205m. Per share earnings were adjusted to reflect 20 per cent. share distribution in November, 1970. Figures were converted from Yen at rate of Yen 360 to dollar.

## New constitution for Pakistan in December

By Kevin Rafferty

PRESIDENT YAHYA KHAN announced yesterday that a new constitution for Pakistan would be published on December 20, and that the National Assembly would meet on December 27. A new central Government would be formed "soon after the inauguration session of the National Assembly," the President promised.

But he devoted most of his attention to an emotional broadcast to the nation to an attack on India which he accused of actively preparing for a war of aggression against Pakistan, and Pakistan in turn conditions in India by force.

The President detailed a number of specific charges against India, including that it had plotted the break-up of Pakistan with "secessionist" forces from East Pakistan; that it had sent spies and saboteurs trained and sent by India had tried to damage foodstuffs in East Pakistan ports as part of a campaign to create famine in the province; and that India had moved army and air force units forward to strike positions on borders surrounding East Pakistan.

But he claimed "there is no reason for undue alarm" and that the Government and Army of Pakistan were alive to the danger and "fully prepared to defend and protect every inch of the sacred soil of Pakistan." Altogether the attack on India took more than half of President Yahya's 40-minute broadcast and overshadowed the latest constitutional moves.

He made no mention of the secret trial of the Awami League leader Sheikh Mujibur Rahman, whose party captured 75 per cent. of the popular vote in East Pakistan and an absolute majority of seats in the National Assembly in December's elections. Nearly half of the Awami

League members were declared disqualified from the Assembly after the party had been outlawed following the March 25 crackdown and arrest of Sheikh Mujib as a traitor.

President Yahya made no mention of dangers of famine in East Pakistan apart from his attack on India. UN officials today discuss a report that 40m. people may be in danger of starving to death by the end of the year.

The timetable for the return to civilian rule is slower than anticipated in President Yahya's previous broadcast on June 28. Then he said he hoped to be able to transfer power to the people "in a matter of four months or so." Amendments to the constitution can be proposed within 80 days of the formation of the Government, the President said.

Some observers believe that

General Yahya launched his attack on India in order to obscure his own internal difficulties and boost the nation's confidence. But at the same time it is true that there is tension across the Indian and Pakistan borders.

The Government-controlled Press Trust of India reported from New Delhi yesterday that Pakistan army units had moved into forward positions along the border between West Pakistan and India.

The Pakistan President gave no clue as to how or by whom the new central Government would be chosen. With the backing of the Awami League, Mr. Z. A. Bhutto's People's Party became the largest party with 83 seats, all in two of the five provinces. Mr. Bhutto and the President have lately been reported as having clashed about the transfer of power.

### Indian farmers escape tax

By Our Own Correspondent NEW DELHI, Oct. 12.

FINANCE Minister Y. B. Chavan's strong plea to the Chief Ministers of States to need to mobilise additional resources and that the States levy a tax on farmers' incomes should lend a helping hand, they in a bid to obtain more funds to pay for Bangladesh refugees were virtually rejected today.

The Indian constitution has created an anomalous situation by giving the States the sole right to levy agricultural income-tax while income-tax on the remaining sections of the population is levied by the centre.

Today's conference of Chief Ministers was called by Mr. Chavan to persuade them to include the levying of rural income-tax in their budgets, and higher duties on fertilisers.

## Showdown between bureaucrats and generals likely in China

By Our Own Correspondent

HONG KONG, Oct. 12.

NO CHINA watcher, whether in Peking, Hong Kong or Paris has yet anything to add to the statement made nine days ago by the French Ambassador to Peking who said simply: "Something has happened in China. I cannot tell you anything more."

The Ambassador, M. Etienne Manac'h, accompanied China's Foreign Trade Minister, Mr. Hsiang-kuo on his visit to France.

Something has happened but the more experienced observers of the Chinese scene are convinced that there is nothing much in the recent reports (attributed to U.S. Government sources) alleging that Lin Biao is dead or perhaps dying.

On the other hand, Lin Biao's health has been frail for many years (at least since his hard fought campaign in the Korean war) and he is reliably reported to be suffering from tuberculosis. Some of the curious happenings in Peking in recent months could be explained by the hypothesis that Lin's health is undergoing a crisis.

He is Mao's heir and the prospect of his death would certainly reactivate the whole question of the succession. It would help to explain, for example, why Chou En-lai has taken care over recent weeks to be seen with representatives of both the high-ranking pragmatists and those ele-

ments in the leadership identified with the ultra left during the Cultural Revolution.

Whatever is happening, it is evidently not a major leadership crisis—otherwise, Chou En-lai would not have felt able to take time off to accompany Emperor Haile Selassie on his tour of Shanghai. Opinion is growing that a major policy dispute is at the bottom of the cancelled October 1 parade, of the failure to publish the annual joint People's Daily/Red Flag editorial, of the intermittent internal plane flights and of the inability of the New China News Agency to publish anything more meaningful to mark National Day than a report of the doings two days previously of Prince Norodom Sihanouk, Cambodia's exiled and deposed head of State.

The cancelled joint editorial is the most significant pointer. The year pointed the way for China's next 12 months in economic and political development. The physical absence of Lin Biao and the Chief of Staff Huang Yongshen indicate a deep difference in Army-Party relations. It may revolve around the size of the military budget under the new five-year plan but more likely it concerns the weight of the army's voice in policy-making.

Recently Shensi Province radio has called for total obedience by the military to local party instructions. Peking has called on the troops to learn from the masses and be "their little pupils and servants." Much prominence is being given to the "three great rules and eight points" to be Mao himself back in 1947.

This looks very like an effort by the party to restore its control over the army which has been given enormous power ever since it was called in "to restore discipline during the excesses of the Cultural Revolution."

It is possible that in the days preceding the forthcoming National People's Congress the Party has reasserted itself insisting on controlling not only the Government but the gun, thus setting the scene for a confrontation between the generals and the bureaucrats.

Our Foreign Staff adds: Two of China's 29 provincial radio stations have ceased relaying locally produced programmes and are now carrying Radio Peking broadcasts. They are Kweichow Radio in Kweichow Province and Hainan Radio in Hainan Province. Observers see this as indicative of some sort of trouble in the two areas, noting that similar procedures were followed in disturbed provinces during the Cultural Revolution.

## THE SHAH'S CELEBRATIONS

### Waiting for the fireworks

By Liz Thurgood, Tehran Correspondent

WHAT HAS IRAN'S small, but on occasions spectacular, group of Lefthand guerrillas planned to "mark" the celebrations for the 2500 years of Persian monarchy? This has been the big question for the last few weeks. The Government says that it knows the answer—"nothing can or will happen at Persepolis." But more accessible to the Press proving elusive enough to keep officials very much on their toes.

Two months ago Iranian security (SAVAK) uncovered plans to kidnap the British Ambassador, Sir Peter Rumbold, three weeks ago an American girl was held at Mehrabad on espionage charges; and on September 23 Prince Shapur, one of the two sons of the Shah's twin sister, Princess Ashraf, reportedly escaped with his life after a shooting incident in downtown Tehran. In addition, there have been two confirmed and several other reported bombings in public places. There can be no denying that, despite the official "cool" front, a war of nerves appears to be hotting up in Tehran as the country approaches the much-heralded, and in some quarters equally criticised, celebrations next month.

### Ideal setting

The presence, for nearly three days from today, of nearly half the world's monarchs and Heads of State in a ten-mile city more than 600 miles from Tehran may seem an almost ideal setting for a group of guerrillas apparently out to leave their mark on modern Iranian politics. But with security extremely tight—the ancient palace of Persepolis is bristling with bayonets and a large military camp only a few kilometres down the road—any spectacular acts such as assassination attempts have already been ruled out.

For a long time now Tehran's political pundits have thought the kidnapping of a minor aide a much more real threat. They point out that during a time when Iran's catching "political maturity through 2500 years of continuous monarchy," it could prove a major embarrassment to

the powers-that-be in Tehran. SAVAK, however, casually dismissed such speculation recently during an "unofficial" interview with one of its staff members—probably the first of its type for any Western correspondent—at the impressive new headquarters in North Tehran. It has recently become SAVAK policy to spruce up its image by making itself rubels provided a not-so-subtle reminder that they were very much around by planting a time bomb in a flower pot outside a police station in downtown Tehran. Two policemen were killed and several people wounded.

### A surprise

The security arrangements are obviously massive, though, SAVAK insists, no bigger than Britain's would be during a State visit. To ensure the Shah's guests a trouble-free visit, a "special committee" has long been set up within SAVAK. The regular SAVAK ranks are being swollen with recruits from the state police. Security has already been stepped up in and around Shiraz and at Tehran hotels where some of the Shah's guests will be staying when the celebrations switch from Persepolis to the capital, Tehran.

### Hefty toll

The violence from Iran's home-grown guerrillas has already taken a pretty hefty toll. A total of 33 persons have so far lost their lives—two State police, five guerrillas, one security agent and 25 guerrillas, either in shooting affairs or before the firing squad. Another 150 members of the guerrillas, including seven of the nine students involved in the tower-top bombing and the more recent dynamiting of the Finance Ministry clock-tower, are in prison or awaiting trial. SAVAK is adamant that reports of at least 1,000 intellectuals being rounded up prior to the 25th anniversary celebrations are "completely without foundation."

There now appears to be some misgiving over the secret trial

beginnings of the Shah-Kal guerrillas last February, the killing of Iran's military tribunal chief, General Farsu, a shoot-out with police and several bank raids, the guerrilla-anarchists had for several months been remarkably low. But on National Uprising Day last month, an event marking the overthrow of former Premier Mossadeq, the guerrillas provided a not-so-subtle reminder that they were very much around by planting a time bomb in a flower pot outside a police station in downtown Tehran. Two policemen were killed and several people wounded.

### Little time

Huw Sharon Lucille Leher of Oakland, California, his into this picture is not at the moment clear. She was picked up on September 5 at Mehrabad Airport, on her way west and carrying anti-iranian propaganda leaflets and tape recordings. Because of a background as an active participant in San Francisco anti-iranian demonstrations, the Iranian consulate in New York had refused her a visa to travel to Iran. Using her married name of King Ishe, she had been in London on a new passport and got a visa at the Iranian consulate there. SAVAK claims she arrived here some two and a half months ago with \$10,000 and put in a long stint in north-east and Central Iran, paying off certain farmers and villagers as she went. While investigations go on, Miss Leher is marking time at the women's prison in Tehran. Her trial could come up sometime around Christmas.

### Hefty toll

The violence from Iran's home-grown guerrillas has already taken a pretty hefty toll. A total of 33 persons have so far lost their lives—two State police, five guerrillas, one security agent and 25 guerrillas, either in shooting affairs or before the firing squad. Another 150 members of the guerrillas, including seven of the nine students involved in the tower-top bombing and the more recent dynamiting of the Finance Ministry clock-tower, are in prison or awaiting trial. SAVAK is adamant that reports of at least 1,000 intellectuals being rounded up prior to the 25th anniversary celebrations are "completely without foundation."

There now appears to be some misgiving over the secret trial

## Soviets stress need for peace in Middle East

By Our Middle East Correspondent

PRESIDENT Podgorny yesterday promised Egypt and its Arab allies that the Soviet Union would back the search for a peaceful solution of the Middle East deadlock conflict "with energetic measures."

Speaking at a Kremlin lunch on the first day of talks between President Sadat and Russian leaders, President Podgorny laid the emphasis on a political settlement. This indicated that the Soviet Union—as expected—counselling restraint, to President Sadat who has promised his people that 1971 will decide whether there will be a peaceful or a military solution.

Earlier President Podgorny, Mr. Alexei Kosygin, the Prime Minister, and Mr. Leonid Brezhnev, Party General-Secretary, had held two hours of talks with President Sadat. The official Soviet news agency Tass said that the discussions had centred on efforts to eliminate "the aftermaths of Israeli aggression" and to find a lasting

peace for the area. Soviet-Egyptian relations were also covered.

It seems likely that the "energetic measures" pledged by President Podgorny will fall short of what Egypt wants—in particular the provision of an offensive capability in Egyptian or Russian hands for striking into Israel's heartland.

The overflight of Israel by two MIG 23 aircraft on Sunday appears to have been a sop to President Sadat's demands. It must be assumed that the super-sonic aircraft, which flew at high altitude some seven miles off Israel's coastline, were piloted by Russians.

President Podgorny also made an apparent reference to President Nasser's crackdown on the Communists in the Sudan and, possibly, to recent anti-Soviet manifestations in Cairo. He warned: "the anti-Communist and anti-Soviet campaign, fanned up by the imperialists and their agents, aims at pursuing purposes which are alien to the Arab People."

## South Africans warned of threat to security

By Our Own Correspondent CAPE TOWN, Oct. 12.

IN WHAT was clearly an oblique reminder to last week's border incident on the Caprivi Strip, in which a South African police captain was killed and four constables badly hurt in a landmine explosion near the Zambian border, the South African Minister of Defence, Mr. P. W. Botha, warned at the Cape Congress of the National Party near here today of dangerous forces bent on destroying orderly Government in South Africa.

Mr. Botha who is Cape leader of the Party, said that if these forces could not be stopped through indirect attempts to undermine South African society they would do so by direct strategy.

Mr. Botha made a powerful plea for "greater unanimity" between people who agreed over South Africa's fundamental interests. He told about 350 delegates that many South Africans lacked an awareness of danger totalling Yens51,064m. (\$1,670m.) and that there was a lack of patriotism in the approach to South Africa's economic situation.

Mr. Botha said: "These (dangerous) forces are bent on destroying our northern AP

## JAPAN APPROVES EXTRA BUDGET

TOKYO, Oct. 12.

THE Japanese Cabinet today approved a large supplemental Budget for the 1971 fiscal year after hearing that the Economic Planning Agency (EPA) has nearly halved its official projection for the country's economic growth this year. The Government had previously approved additional outlays of Yens244,884m. of which will be Yens244,884m. of the general account Budget and Yens206,400m. to the Government loan and investment programmes.



4. Practice being as nice to your stewardess as she is to you. Note repeated enquiries after your well-being. Observe civilised 'please' and 'thank you'—especially as she serves your 6 magnificent meals.



5. If still in need of relaxation, go for long walk.

This new way of travelling to Australia begins November 1 when ours becomes the first 747 ever to fly Down Under direct from London. From then on you can fly any Monday, Wednesday or Saturday. Leave Heathrow around lunchtime. Fly via Hong Kong to Sydney or Melbourne. And the cost could come as a pleasant surprise—thanks to BOAC Earthshrinkers. You could fly to Hong Kong for only £199 (Earlybird return). Or to Australia for only £341 (Group 40 Fare). Or take a 26-day inclusive holiday Down Under for £196. Ask your BOAC travel agent.

First 747 direct to Australia. BOAC takes good care of you.





# The Technical Page

EDITED BY ARTHUR BENNETT AND TED SCHOETERS

## NAVIGATION

### Near misses can be avoided

TO-DAY and to-morrow representatives of the Department of Trade and Industry will be shown "black boxes" which, in their simplest form, could put an end to the pilots' nightmare of a near miss in the crowded skies at the approach to Britain's major airports.

At Sunbury-on-Thames, RCA International will demonstrate how a cigarette pack sized box of electronics can be used on board any type of aircraft to warn the pilot that an aircraft has penetrated a range shield and is converging on his course.

Speaking about the "Secant" family of air collision prevention equipment yesterday, Mr. Irving K. Kessler, RCA executive vice-president, said that without wanting to be glib, he would undoubtedly be at some time in the future a collision between two of the new, wide-bodied aircraft. Then there would be

every chance that Governments would be alerted to the need for some means—apart from ground control—of averting the increasingly frequent near misses in the air.

RCA did not want to supersede ground control and this approach was fine for the big line aircraft. But only too frequently in the past the danger and the actual accident had come from too close an approach by the small private aircraft. It was to these that the smallest Secant equipment could be applied, with a major increase in the safety factor near big airports. The "Remitter" is the simplest unit of the family, costing about £380. It responds to the "challenges" of all other aircraft nearby.

The next step up is a proximity warning indicator which tells the pilot when another aircraft is within a set distance. Successive

steps in sophistication add further options to the equipment, but even at its most complex—suggesting to the pilot an avoidance manoeuvre with a two-fold gain in time to danger point—the total cost per set would be of the order of £10,000, which is low compared with a number of flight deck units.

Typically, a pilot would have 45 seconds in which to react against about 22 seconds where other systems of the time frequency type are involved.

The equipment is not only compact, but also consumes very little power—between 2 and 3 watts, or about two orders of magnitude less than competing units.

The RCA team has been talking to air authorities in France, Germany and Italy and all have expressed keen interest in the development which has already been proved to work.

## PROCESSES

### Metal skin on plastics

TO BE electroplated, plastics must be conductive to attract the ions of metal. An adherent first layer of metal can be produced by converting metallic oxides on the surface into pure metal.

The oxide is first painted on to the plastic part in the method developed by the General Electric Company, 1 Plastics Avenue, Pittsfield, Mass., U.S. After drying, the coated part is put into an electrolytic bath for the first conversion. Current is connected to the part and to a stainless steel electrode, the part being the negative pole. As it flows through the watery electrolyte, the current converts the oxide into pure metal which makes the part conductive.

This plating, however, is not thick enough to protect the plastic from wear and weather and give it the metallic appearance desired for motorcar parts. Thus the conductive part goes next into the regular plating bath where it gets a thicker coating of the finishing metal.

The oxides employed may be of indium, cadmium, zinc or lead. Since they are not conductive as painted on, General Electric uses an ingenious method of applying current to them. The parts in the aqueous electrolyte pass under brushes of carbon fibres sandwiched between two stainless steel sheets. Current flows through the brushes into the electrolyte, but on its way it converts the oxides into the pure metal.

General Electric sees the possibility that the method, by selective placing of the brushes, can be used to form metallic patterns on an insulating substrate. This could be useful, for instance, in the quantity production of printed circuit boards.

## METALWORKING

### Savings in die production

NET SAVINGS of up to 75 per cent in the cost of producing the multitude of intricately shaped parts made from sheet metal which are required in aircraft production are claimed for a new method of making blanking dies. For many years small quantities of dies have been made by hand, but the new process feasible orders have presented one of the biggest barriers to greater production efficiency in the British aircraft industry. Now, collaboration with other countries is producing a total requirement for particular aircraft, on which investment and planning for production is based. It is the opportunity to plan in hundreds rather than tens which has made the new process feasible.

With this sort of production worth consideration but the conventional tools used by the mass production industries are too costly, so an economic method of manufacturing dies and punches had to be developed. When the British Aircraft Corporation was assured that the British and French Governments would be ordering 400 Jaguar fighters, technicians of the company's Military Aircraft Division

developed an economic approach to die making in which the capital outlay has been virtually nil. Existing equipment is used, of which the principal item is a flame cutter controlled by drawing follow-up equipment.

The only capital cost has been a modification to the flame cutter by BAC's electronics department. This enables the otherwise standard piece of equipment to cut at a 7 degree angle instead of vertically, saving the time and cost required to level the work. The major innovation is the flame cutting of 2 or 3 in medium carbon low alloy steel sheet used for the dies, with the sheet being cut submerged in a tank of water so that the water just covers the top surface. This means that the cutting and hardening processes are combined in one operation.

A further bonus comes from the fact that there is almost no distortion and large tools can be made in one piece for the first time—for example, a die almost eight feet long has been produced in only three sections previously 12 would have been needed.

As with all processes, the new method does have limitations. While "life tests" proved the system to be more than adequate for the production of these tools has been limited to a minimum corner radius of 1.32 in. Cumulative tolerances of +0.030/-0.18 in. have been accepted for components produced by this method.

Adoption of the "economy die" for the manufacture of aircraft parts is obviously desirable on the production run, the component material, its thickness and the size of the component.

The economics of components produced in 16 swg titanium, titanium alloy are better than those for 16 swg aluminium alloy, as the latter requires greater periphery to achieve given saving in an equivalent production run. For a run of 500 parts in batches of 50, for instance, the minimum economy peripheries for the two materials are 4 and 30 in. respectively.

In the company's opinion, the die, as opposed to nibbling, an economic proposition for the production of this type of item. The process is being refined, and a flame cutting technique is being developed for flame profile direct from a loft plate, eliminating the need for a special prior



## CONSTRUCTION

### Fast double-deck lifts

LIFTS for the 800 foot high National Westminster Bank headquarters building in the City of London, designed to carry 100 people a minute to their correct floors during rush periods, include double-deck units that will travel at 1,400 feet per minute.

A £1m contract for the lift installation work has been

awarded to the Express Lift Company (part of the General Electric Company).

To provide lift facilities for the 4,000 people that will eventually occupy the headquarters in Bishopsgate (the tallest office building in Europe) five double-deck lifts will carry passengers to a two-floor "sky-lobby" halfway up the building.

There will be a total of 41 lifts and six escalators serving the 48 storeys. The double-deck lifts will operate a high-speed shuttle service to the intermediate change-over levels on the 23rd and 24th floors, where passengers will take conventional lifts in the individual upper floors.

The building is being considered as two separate halves, within each of which a further degree of sub-division will operate. As staff and visitors approach the building from the various ground levels, they will be directed to the appropriate lift for their destination.

When asked what arrangements had been made for totally evacuating the building in an emergency, Colonel Seifert, senior partner of R. Seifert and Partners, the architects for the scheme, said that the buildings conformed to the appropriate regulations.

These require that in case of fire the lifts are taken out of service, except for special lifts for the exclusive use of the Fire Brigade, and that occupants have to walk down the stairs. The regulations are based on the philosophy that it is never necessary to totally empty modern office buildings.

A spokesman for the architects department of the Greater London Council said that his department's records showed no fatalities from fire in modern offices. He considered the Bank headquarters "100 per cent safe."

Express Lift's spokesman said the time for evacuating the building using all the lifts in normal service would be about 15-20 minutes.

The authorities involved appear to be confident that they would be able to contain any panic that may result from a fire.

MARTIN ROUTH

### Refuse compaction station

SAVINGS of something like 352,000 miles and 14,000 man-hours are expected to result from a £60,000 installation just opened at Fishers Green, Waltham Cross, Essex, by Hales Containers (Ready Mixed Concrete group).

Refuse collection vehicles operated by Hales will leave refuse at the new plant to be hydraulically compressed and taken on to disposal points in the more economical compressed state.

Designed to handle 500,000 cubic yards of waste a year, the plant is claimed to be the first transfer station of its kind in the country.

It was supplied by Powell Duffryn Engineering, of Llantisant, South Wales, assisted by Powell Duffryn Technical Services, which acted as civil engineering design consultants and construction managers.

This type of plant is well proven on the Continent, where it has been supplied by Powell Duffryn's Dutch subsidiary, Geesink N.V.

The cost of the Transpack, Dumpmasters and tractor unit was £38,000, and the remaining £22,000 was spent on laying concrete access roads and tipping platform. Hales present disposal site is 12 miles from Tottenham, the centre of the company's operations, and will be full by the end of the year. The nearest alternative site is 20 miles away, which becomes uneconomical for primary collection vehicles, often carrying loads of low density.

Hales operates more than 200 refuse collection vehicles in the Home Counties.

## HEATING

### LPG wins in brickworks

TWO well-known producers of various kinds of building bricks have recently gone over to liquefied petroleum gas to operate their kilns, replacing the fuel oil previously used.

Eastock Brick and Tile Company is installing gas firing at its Elton Head works at Roughdale to replace the existing oil-fired equipment. The recently acquired Chester Lane works already is on gas and the whole operation at Roughdale will have switched over by the end of the current month.

Technical management anticipate higher kiln throughput of the high quality facing bricks the company turns out. LPG should also give better combustion control as well as cleaner burning and a considerable saving in fuel cost is expected.

At Redland Bricks, two kilns in the Holbrook Works have been

converted from oil to gas firing as part of a one-year programme undertaken as a result of sharp increases in coal and oil prices.

The company had been carrying out a good deal of testing advance of the conversion anticipating the availability of natural gas in large volume. The onset, however, the first trials were made with LPG as such was the success of the operation that the company decided to stay with this form of fuel.

Redland acknowledges the economic advantages of LPG, but also underlines how important the fact that no sulphur compounds are evolved when the gas burns, while other less common pollutants are produced in quantities comparable to the proportions in which they are normally found in the atmosphere.

### Paraffin central heating

PARAFFIN heaters are often regarded as the "poor relations" of other heating systems, and a paraffin heater is placed on the landing "just to take the chill off." Paraffin heaters these days amount to more than that as a cheap form of heating, and now Valer Heating in conjunction with Esso, has come up with a paraffin unit heating system that presents a challenge to night storage heaters, free standing electric fires and oil filled radiators.

The system—known as Valormatic—does away with the need for the householder to handle fuel, a factor which has always been a stumbling block when attempting to challenge electricity or gas. Valormatic is based on a two-burner heater unit giving a varying heat output of up to 9,000 BTH/HR—more than 2½ kW.

This heater unit is connected by a thin copper tube to a 25-gallon storage tank outside the house. Considering the paraffin is running through the tube it is remarkably thin—only one eighth of an inch which is thinner than telephone cord.

The fuel is fed to the burners by a small electric pump fitted in the heater itself. Apart from the obvious advantage that the householder is not handling fuel, the tank, which can be installed above or below ground, can be filled by the "paraffin man" on his regular rounds.

It also ensures that there is never more than a very small amount of paraffin inside the house. An added safety factor is that if the fuel line should be broken for any reason, no more than a drop would spill and the rest would be pumped through and burned.

With paraffin, cost is of course a major factor. In this direction, Valormatic claim that two Valormatic heaters can be run for seven days at full output for £3.03. The equivalent heat output from night storage heaters would cost £4.10, but for free-standing electric heaters and oil-filled radiators it would be £7.70, says Valormatic.

One heater unit, installed with a 25 gallon tank, would cost £50 and other units could be added later. But quite apart from house heating Valormatic sees great potential for shops, offices, factories and churches. According to the number of heaters needed, fuel tank size can be increased.

### First Class Mail

Imagine it, Crisp, clean letters, shining your firm's face to the world. And a clean pair of heels to the competition.

Equip your office with the Adler Electric Typewriter: famous for its reliability. For details, put your name on this ad and send it to us, pinned to your letterhead.

NAME \_\_\_\_\_

FT131/10

ADLER

OFFICE & ELECTRONIC MACHINES LTD.

148/154 Borough High St., London, SE1 1HR.

Telephone: 01-407 3191. Telex: 837346.

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

### Handling for the thinking businessman: YIELD



## Isn't it time you abolished capital punishment?

You invest a lot of capital in buildings, plant, equipment, people. Are you really getting the return you want and need under the current conditions? To get better returns you must either increase throughput or reduce costs. Easier said than done? Yes and no.

We invested a lot of money over the years in designing, developing and producing the world's widest range of quality lift trucks, sideloaders and container handlers. Diesel, LP Gas, Petrol and Electric. To handle loads from one to fifty tons. Up to 30 per cent of your product's end price could be eaten up in handling costs. Lancer Boss

trucks are designed and built to give faster, safer, easier and cheaper handling—for longer. With Lancer Boss trucks you can start reducing handling costs (or increasing throughput) now. You start saving as soon as you take delivery (and our delivery is good), without waiting for any long term building or plant project. With Lancer Boss you get a lot and you get it at sensible prices. You have to spend, but we can make that virtually painless—rent or lease a Lancer Boss lift truck and you don't have to put down a penny of capital. Let our investment work with yours—for you.

Please send me details of the Lancer Boss range together with details of your leasing and rental schemes.

Name \_\_\_\_\_  
Position \_\_\_\_\_  
Company \_\_\_\_\_  
Address \_\_\_\_\_



Lancer Boss Ltd.  
Leighton Buzzard, Bedfordshire.  
Tel: Leighton Buzzard 2031

# LANCER BOSS

LIFT TRUCKS FOR THE THINKING BUSINESSMAN

ملکنا من لندر

### pollution environmental information bulletin

the unique monthly publication for everyone in government and industry for protecting the environment. For details write: NUMBER FOUR - HIGH STREET - ALTON - HAMPSHIRE



# To convert lb. to Kg. simply multiply by 0.453 592 37.

## Or talk metrication to Avery. Now.

The coupon below could be one of the biggest ever printed in the British press.

It deals with one of the biggest tasks facing British Industry. Metrication.

And particularly the metrication of weighing equipment. Before you dismiss weighing as being only a minor part of the total metrication programme, let's put it in perspective.

Virtually every industry and every process uses weighing equipment for control purposes. The majority of this equipment will need to be converted or replaced.

Programmes aimed at substantially completing metrication well before 1975 have already been announced by many industries.

How we meet your particular target date depends as much on you as on us.

So before planning your metrication date, talk to Avery. Or if it's already planned, we need to know your requirements for metric equipment or conversion soon. And this coupon will help to get your metrication programme moving today.

Company \_\_\_\_\_

Type of industry \_\_\_\_\_

Address \_\_\_\_\_

Telephone \_\_\_\_\_

Name of person to contact \_\_\_\_\_

Position in company \_\_\_\_\_

Your company's metrication target date \_\_\_\_\_

Please get your secretary to clip this coupon to your letterhead or write to us direct.

# AVERY

W&T Avery Limited Birmingham 40



# VAAL REEFS EXPLORATION AND MINING COMPANY LIMITED

(Incorporated in the Republic of South Africa)

## OFFER OF SHARES TO MEMBERS

In a circular posted to members on 30th September 1971 preliminary information was given about a proposed offer of shares to members. The terms of this offer have now been settled and are as follows:—

## OFFER OF 5 MILLION SHARES

Members registered in the books of the company at the close of business on 15th October 1971 will be offered the right to subscribe for a total of 5 000 000 shares of 50 cents each in the capital of the company at a price of 630 cents per share (South African currency), in the ratio of 36 new shares for every 100 shares held at that date, fractions of new shares being disregarded.

It will be noted that, if all members exercised their rights in full, the total number of shares applied for will be 40 000 in excess of the 5 000 000 shares forming the unissued capital of the company. In that event, Anglo American Corporation of South Africa Limited and/or its nominees, as major shareholders in the company, have agreed to forego their rights in respect of their own holdings up to a maximum of 40 000 shares, in order to satisfy applications received from other shareholders.

The 5 000 000 new shares which are being offered to members will, when issued and credited as fully paid, rank pari passu, in all respects, with the existing issued shares of the company.

Members will be entitled to subscribe for the following number of new shares in respect of each 100 (one hundred) or part of 100 (one hundred) existing shares held by them:—

| No. of existing shares held | No. of new shares that may be subscribed | No. of existing shares held | No. of new shares that may be subscribed |
|-----------------------------|--|-----------------------------|--|
| 1-2                         | Nil                                      | 50-52                       | 18                                       |
| 3-5                         | 1  | 53-55                       | 19                                       |
| 6-8                         | 2  | 56-58                       | 20                                       |
| 9-11                        | 3  | 59-61                       | 21                                       |
| 12-13                       | 4  | 62-63                       | 22                                       |
| 14-16                       | 5  | 64-66                       | 23                                       |
| 17-19                       | 6  | 67-69                       | 24                                       |
| 20-22                       | 7  | 70-72                       | 25                                       |
| 23-24                       | 8  | 73-74                       | 26                                       |
| 25-27                       | 9  | 75-77                       | 27                                       |
| 28-30                       | 10                                       | 78-80                       | 28                                       |
| 31-33                       | 11                                       | 81-83                       | 29                                       |
| 34-36                       | 12                                       | 84-86                       | 30                                       |
| 37-38                       | 13                                       | 87-88                       | 31                                       |
| 39-41                       | 14                                       | 89-91                       | 32                                       |
| 42-44                       | 15                                       | 92-94                       | 33                                       |
| 45-47                       | 16                                       | 95-97                       | 34                                       |
| 48-49                       | 17                                       | 98-99                       | 35                                       |
|                             |  | 100                         | 36                                       |

Arrangements have been made for this offer of 5 000 000 shares to be underwritten by Anglo American Corporation of South Africa Limited ("A.A.C."), to the extent of 70 per cent, Union Corporation Limited ("U.C."), to the extent of 20 per cent, and Johannesburg Consolidated Investment Company Limited ("J.C.I."), to the extent of 10 per cent, for a total cash commission of R787 500, equivalent to 2½ per cent of the issue price.

Mr. J. W. Shilling is a director and manager of A.A.C. He is the registered holder but not the beneficial owner of 1 000 shares and has an indirect interest in a further 1 000 shares in that Corporation.

Mr. C. B. Anderson is a managing director of U.C. in which he holds 20 000 ordinary shares. He also holds 500 preference shares in A.A.C.

Mr. A. D. Backwell is an assistant manager of A.A.C. in which he is the registered and beneficial owner of 500 shares.

Mr. E. P. Gush is a manager of A.A.C., but holds no shares in that Corporation.

Mr. M. C. O'Dowd is a manager and alternate director of A.A.C. in which he is the registered holder but not the beneficial owner of 1 000 shares.

Mr. G. H. Waddell is an executive director of A.A.C. in which he is the registered holder but not the beneficial owner of 1 000 shares.

Mr. A. Wilson is an alternate director and manager of A.A.C. in which he is the registered holder but not the beneficial owner of 41 060 shares.

Mr. P. R. Wilton is an executive director of J.C.I. in which he is the registered holder but not the beneficial owner of 250 shares.

Mr. R. C. J. Goode is an assistant managing director of U.C. in which he holds 600 shares, and is the registered holder of 100 shares in J.C.I.

Mr. B. A. Smith is a director of J.C.I. and the registered holder but not the beneficial owner of 250 shares in that company.

Renounceable Letters of Allocation (nil paid) will be posted on 22nd October 1971, to members registered at the close of business on 15th October 1971, and the offer will close at 3 p.m. on 5th November 1971.

The Committees of the Johannesburg and Rhodesian Stock Exchanges have granted preliminary listings for the letters of allocation and subsequently for the shares as follows:—

(i) Renounceable Letters of Allocation (nil paid) in respect of 5 000 000 shares will be listed from 15th October 1971 to 5th November 1971, both days inclusive. Dealings on the Johannesburg Stock Exchange from 15th October to 22nd October 1971, inclusive, will be for settlement in account No. 43; thereafter dealings will be for normal settlement. The last day for splitting renounceable letters of allocation (nil paid) will be 3rd November 1971.

(ii) Renounceable Letters of Allocation (fully paid) in respect of 5 000 000 shares will be listed from 5th November 1971 to 17th December 1971, both days inclusive. Dealings on the Johannesburg Stock Exchange from 5th November 1971 to 12th November 1971, inclusive, will be for settlement in account No. 46; thereafter dealings will be for normal settlement. The last day for splitting renounceable letters of allocation (fully paid) in Johannesburg will be 15th December 1971.

(iii) 5 000 000 shares of 50 cents each will be listed from 20th December 1971 to 14th January 1972, inclusive, will be for settlement in account No. 3. All subsequent deals will be for normal settlement.

Application is being made to the Council of The Stock Exchange, London, for permission to deal in and for quotation for the shares. It is anticipated that dealings in the new shares on The Stock Exchange, London, from 18th October 1971 will be for special settlement on 28th October, and thereafter will be for normal settlement. The last day for dealing nil paid will be 5th November 1971. The last day for splitting fully paid renounceable letters in the United Kingdom will be 16th December 1971.

## APPLICATION FOR EXCESS SHARES

In addition to the shares to which members are entitled as of right, in terms of the above arrangements, members will also be able to apply at the same price for shares in excess of their rights. Applications for excess shares must be on separate application forms which will accompany the offer documents. In the event that some rights are not exercised, the shares represented by such rights will be available for allocation to applicants for excess shares. The allocation of any such shares will be made at the entire discretion of the directors after the close of the offer. As mentioned later, non-residents of the Republic of South Africa or South West Africa are advised that blocked rand must not be used to subscribe for excess shares.

An announcement concerning the result of the offer and the basis of allocation of excess shares, if any, will be made in the press on Thursday, 11th November 1971. Fully paid letters of allocation in respect of excess shares allocated, and/or cheques refunding application moneys in respect of unsuccessful applications for excess shares, will be posted to such applicants on or before Monday, 15th November 1971. Such fully paid letters of allocation may be dealt in, from the date of the press announcement stating the basis of allocation, as if they were fully paid letters of allocation arising from the exercise of rights. Refund cheques will be drawn in the currency in which the original payments were made. Cheques drawn in U.K. currency will be converted at the exchange rate applicable on Monday 15th November 1971 (see "Currency Conversion" below).

## SUBSCRIPTIONS BY NON-RESIDENTS

## Blocked Rand

Shareholders who are non-residents of the Republic of South Africa or South West Africa are advised that blocked rand may be used in subscription for the shares to which they will be entitled.

Blocked rand may also be used to purchase renounceable nil paid letters of allocation, but may not be used to subscribe for the shares arising from such letters.

Non-resident shareholders are also advised that blocked rand may not be used to subscribe for excess shares.

## Currency conversion

Payment of the subscription price by holders of letters of allocation issued by the United Kingdom transfer office may be made either in United Kingdom currency in London or in South African currency by draft direct to Johannesburg. Payments in London must be made at a price of 359p United Kingdom currency per share based on an exchange rate of £1=R1.789683. The company will remit the United Kingdom currency so arising to South Africa at the best possible rate on the next business day (excluding Saturdays) following receipt of payment. Provided this rate falls within a range of £1=R1.751966 to £1=R1.787380, the above price in United Kingdom currency will remain fixed. In the event of such rate falling outside the aforesaid range on the next business day (excluding Saturdays) following receipt, the actual rate of exchange between South African and United Kingdom currencies on that date will be applicable and subscribers will be obliged to pay additionally any shortfall as arising which in the opinion of the directors is material or will receive a refund of any overpayment made. Subscribers who elect to pay in rand by draft to Johannesburg must ensure that the funds are available in Johannesburg by the close of the offer.

The above conditions will also apply to subscriptions in respect of applications for excess shares.

Copies of this announcement will be posted to members as soon as possible.

By order of the Board  
For and on behalf of  
ANGLO AMERICAN CORPORATION  
OF SOUTH AFRICA LIMITED  
London Secretaries  
E. Burrows

LONDON OFFICE  
40 Holborn Viaduct, London EC1P 1AJ.  
TRANSFER SECRETARIES  
Charter Consolidated Limited,  
Kent House,  
Station Road,  
Asford, Kent.  
Consolidated Share Registrars Limited,  
62 Marsh Street,  
Johannesburg.  
P.O. Box 61051, Marshalltown, Transvaal.  
12th October 1971

## Electronics output breaks £1,000m. barrier in U.K.

BY TED SCHOETERS

THE U.K. electronics industry broke through the £1,000m. production barrier for the first time last year, according to a detailed analysis of the industry released yesterday by the National Economic Development Office on behalf of the Electronics Industry Council.

Gross output for the year was valued at £1,400m., an increase of 21 per cent on 1969 and double the rate of rise compared with the preceding year. If all possible sources of duplication within the industry are eliminated, the production figure appears as £1,200m., compared with £994m. in 1969.

Production of capital equipment rose very sharply to a total of £666m., against £355m. a year earlier, and computers, as could be expected, represented the largest share at £240m., also sharply up from £164m. over the year.

Output of electronic consumer goods also boomed to £182m. from £119m., thanks principally to a threefold increase in production of colour television. Deliveries of colour TV sets were equal to those of black and white.

The picture, so far, is of a booming industry in most sectors, and indeed, in those detailed by the Little Neddly, there is no sign of any falling off in previous growth rates.

Considering the gross output figure only, there was in 1970 the not inconsiderable figure of £1,200m. as the deficit in the overall visible trade balance. This did not come as a surprise since the successive favourable balances had been falling fast.

## Computer "culpits"

The "culpits" were, as before, computers, active electronic components and consumer goods, in that order. The unsatisfactory performances in these areas were blamed on the lack of good work in telecommunications, passive components and capital equipment for civil and defence needs.

Exports and re-exports of computers and related goods f.a.b.

## Big rises in some Sealink fares

BY DAVID WALKER

BRITISH RAIL is to impose fare increases of up to 24 per cent on its Sealink services to Ireland and the Channel Islands, phased from next month to the beginning of January.

The rises, announced yesterday average 10 to 15 per cent and cover passenger fares, accommodation, vehicle rates and cabin charges. In line with recent policy on rail charges, they are selective, with some tariffs not affected at all. In some cases, the rises are the second within seven months.

The news comes only two days after BR announced that fares on its Motorail services were to go up at next year's start, and that as four new services on the network are introduced.

There, the average increases are to be 5 per cent, in line with the 10 per cent restraint on the initiative which British Rail, alone of the nationalised industries, has still not agreed to follow.

Discussions with the Government on precise arrangements for the return of the London which would enable the BR Board to comply are still in progress.

The latest round of higher charges, BR stressed yesterday,

## Single room charges jump; London most affected

BY RAY DAFTER

THE FINDINGS of a study into hotel charges in Britain published yesterday show that prices for single rooms—those which tend to be used by businessmen—have increased faster than for other types of room. They also indicate that charges have been rising far faster in London than the rest of the country.

Overall percentage increases during the first six months of the year were 8 per cent for single rooms in London, 11 per cent for single rooms and 10 per cent for single rooms with bath. In the provinces the percentage increases were 5 per cent in all categories except for single rooms without bath (7 per cent).

The report, called Hotel Tariff Study in Great Britain, and prepared by hotel and leisure industry consultants Corwell, Greene, Bertram, Smith and Co., points out that the tourist industry in the U.K. could be seriously affected if room rates increased at a faster rate than the rate of inflation in other major countries—either those which provide tourist revenue or those in competition with the U.K. It adds, however, that increases recorded in the first six months may cover the whole of the year.

We would emphasise that in a period of rapid inflation it may not be possible to pass on all increases in costs in higher tariffs, the report goes on. "Naturally, in such a situation of rapid inflation profits may decline in real terms."

## Expensive

Some of the biggest percentage increases were recorded in the more expensive London hotels. For example, a single bedroom with breakfast in a four-star London hotel in June would have cost an average of £5.87, a 30 per cent increase on the December charge, while the same room in a similar hotel in the provinces would have cost £4.10, a 6 per cent increase.

A single room in a three-star London hotel would have cost an average of £3.96 in June, an 11 per cent increase, while it would have cost £3.34 in the provinces (up 6 per cent). In the two-star hotel category results show that in some cases

prices rose faster in the provinces than in London.

A single room in a provincial two-star hotel would have cost £2.76 (up 9 per cent) while a similar room in London would have cost £3.32 (up 8 per cent).

The charges in the average first class moved from £3.10 to £3.50. The charge for transporting a 14-foot car on that route becomes £11.75 instead of £10.75.

To the Channel Islands, an ordinary return from London (Waterloo) is to become £2.20 dearer at £13.20, with the cheap period return going up by £1.70 to £10.20.

Nonetheless, it is noteworthy that even the services to the Channel Islands are to cost over 3 per cent more, though those to Northern Ireland will see advances within that limit.

The biggest advance comes on the Holyhead to Dun Laoghaire mail boat service, where the second class single fare will go up from £2.10 to £2.40 while the first class moves from £3.10 to £3.50. The charge for transporting a 14-foot car on that route becomes £11.75 instead of £10.75.

To the Channel Islands, an ordinary return from London (Waterloo) is to become £2.20 dearer at £13.20, with the cheap period return going up by £1.70 to £10.20.

## Government backing for S-E Strategic Plan

THE GOVERNMENT has approved in principle the Strategic Plan for the South-East—the biggest programme of planned urban development to be tackled in Britain. Mr. Peter Walker, Secretary for the Environment, announced yesterday.

He has told local authorities and interested organisations the Government is satisfied that the plan represents "a reasonable framework for the future planning of the region."

The plan was produced last year by a joint team representing the Government, the Standing Conference of London and South-East Local Planning Authorities, and the South East Economic Planning Council.

It says Mr. Walker, is the most thorough attempt ever made to bring together the various economic, social and other factors involved in the long-term planning of the region. It offers the best prospect of utilising the resources of the region within the national economy and of ensuring high standards of environment.

The plan proposed a flexible strategy designed to accommodate population growth in the region, which might be as much as 4m. to 5m. by the end of the century by concentrating future development in selected growth areas at varying distances from London.

## Green Belt guards

It was reinforced by policies of conserving extensive areas of countryside and safeguarding Green Belts.

The Plan was designed to help relieve the present housing and social problems in inner London. It proposed a regional communication network to provide for traffic between the more important centres of population within the South East and between the South East and the rest of the country.

In particular, the Government has set out a series of priorities for the development and intermediate areas and to regional issues arising from decisions already taken—notably the location of the Third London Airport, at Foulness—and the

## Speed with safety is aim for Concorde: Corfield

BY RAY DAFTER

MR. FREDERICK CORFIELD, Minister for Aerospace, said last night that efforts were being made to make the Anglo-French Concorde not just faster, but safer than other present jet civil aircraft.

Speaking in Edinburgh to direct-tors-general of European civil aviation industries, Mr. Corfield said that in many cases the special demands of meeting the performance standard necessary for Concorde had extended the range and application of the aerospace industry's skills.

In addition, the Royal Aircraft Establishment and other Government centres were engaged on major programmes to ensure the structural safety and performance of Concorde.

The Minister went on to praise "our French partners for their skill and determination with which this joint enterprise has been pursued. Both at Government and industry level, Anglo-French contacts in the course of work on Concorde have line service."

## Enthusiasm

After visiting the TriStar production line, Mr. Noble said there was no doubt about Lockheed's commitment to the aircraft and its enthusiasm for the Rolls-Royce engine.

"I understand that the TriStar is proving to be quiet and extremely stable, and Lockheed and Rolls-Royce are looking with confidence to April 1972, when the aircraft is due to receive its final certification, and enter air-line service."

## PRELIMINARY ANNOUNCEMENT

## Gold Fields

Results for the year to 30th June, 1971, and proposed Final Dividend on Ordinary Shares.

At the Annual General Meeting to be held at The Chartered Insurance Institute, 20 Aldermanbury, London, E.C.2, on TUESDAY, 23rd NOVEMBER, 1971, at 11.00 a.m., the Directors will recommend the payment of a final dividend of 4.5p per share, making a total for the year ended 30th June, 1971, of 7.3p per share (last year 7.291p). Income tax at the standard rate will be deducted except in the case of shareholders of non-residents in respect of whom other arrangements are authorised by the Inland Revenue.

The results of the Group for the year were as follows:—

|  | 1971   | 1970   |
|--|--------|--------|
|  | £'000  | £'000  |
| Dividends and Interest on Investments  | 9,296  | 9,383  |
| Profit on Realisation of Investments   | 6,351  | 6,279  |
| Net Revenue of:  |        |        |
| Industrial and Commercial Companies  | 2,238  | 3,158  |
| Mining and Quarrying Companies   | 11,779 | 13,877 |
| Fees and Sundry Revenue  | 4,900  | 4,572  |
| Less: Administration, Technical and General Expenses   | 34,566 | 37,269 |
| Debt Interest and Loan Interest  | 6,328  | 5,499  |
| Profit before taxation (Note 1)  | 3,622  | 3,985  |
| Less: Taxation   | 24,616 | 27,775 |
| Net Profit for the year  | 8,624  | 10,479 |
| Less: Attributable to Outside Shareholders   | 14,992 | 17,296 |
| Attributable to the Members of Consolidated Gold Fields Limited  | 2,924  | 4,579  |
| Unappropriated Profits brought forward as adjusted, amounted to which is added the Net Profit for the year, as above | 12,068 | 12,717 |
| Appropriations:  |        |        |
| Investment and Exploration Reserve (Note 2)  | 826    | 1,542  |
| Dividends (Cost to the Company)  | 12,068 | 12,717 |
| Preference   | 12,894 | 14,258 |
| Ordinary, including proposed final   | 5,497  | 6,825  |
| Unappropriated Profits carried forward   | 7,397  | 7,434  |
|  | 80     | 80     |
|  | 6,292  | 6,294  |
|  | 1,023  | 1,070  |

NOTES:  
1. Profit before taxation. Whereas a significant improvement in profit was achieved by the Amalgamated Roadstone group, there was a decrease of £3.1 million in the group profit before taxation largely due to lower net revenue from the mining companies. The results of the Mount Lyell copper mine were adversely affected by reduced metal prices and American Zinc sustained a substantial operating loss.

2. Investment and Exploration Reserves. The amount charged against this reserve in respect of adjustments in values of non-subsidary investments and provision for exploration expenditure totalled £2.1 million (£5.3 million). In addition, the value of interests in certain subsidiary companies was written down by £5.6 million (£2.5 million), of which £5.0 million (£2.2 million) was in respect of the Group's interest in the equity of American Zinc.

It is intended to post the Report and Accounts on 30th October, 1971, and subject to confirmation of the proposed Final Dividend at the Annual General Meeting the following arrangements in regard to payment will be made:

The DIVIDEND will be payable to

12th October, 1971.

By Order of the Board,  
J. R. STEWARDSON,  
Secretary.

Consolidated Gold Fields Limited  
49, MOORGATE, LONDON, EC2R 8BQ



cking to  
Plan

## 'Brilliant and wicked' £12m. swindle alleged

TWO BUSINESSMEN carried out a "brilliant and wicked" swindle involving £12m. Mr. Michael Corkery, prosecuting, told an Old Bailey jury yesterday.

### Forged

They deny conspiring between February, 1966, and June, 1970, to utter forged documents.

Mr. Corkery said the weapons they used were the forged documents and complete and utter lies.

## Three fined for tax evasion

THREE businessmen said to have pocketed money which should have gone into their company and avoided £12,500 in tax, were fined £11,000, £5,000 and £4,500 at the Old Bailey yesterday, seven years after the offence was discovered.

They pleaded guilty to falsifying the Inland Revenue with false statements on the profits of Tanion (Newcastle).

A fourth man, George Harold Parmenter Clowes, 60, of Green Tye Road, Much Hadham, was fined £100 after admitting making a false income-tax return and forging an invoice.

George Frederick Charles Tatbot, 63, of Shaw Close, Ewell, received a 12 months conditional discharge after pleading guilty to obtaining money by false pretences.

### More involved

They started to pocket rebates from suppliers which should have gone back into their company and been the subject of taxation.

Mr. Hollis said that both Clowes, an electrical engineer, and Tatbot, a partner in a Surrey company, had denied invoicing Tanion.

Both said money received and paid to the directors was in respect of loans.

Mr. Hollis said that both Clowes, an electrical engineer, and Tatbot, a partner in a Surrey company, had denied invoicing Tanion.

Mr. Hollis said that both Clowes, an electrical engineer, and Tatbot, a partner in a Surrey company, had denied invoicing Tanion.

Mr. Hollis said that both Clowes, an electrical engineer, and Tatbot, a partner in a Surrey company, had denied invoicing Tanion.

Mr. Hollis said that both Clowes, an electrical engineer, and Tatbot, a partner in a Surrey company, had denied invoicing Tanion.

Mr. Hollis said that both Clowes, an electrical engineer, and Tatbot, a partner in a Surrey company, had denied invoicing Tanion.

Mr. Hollis said that both Clowes, an electrical engineer, and Tatbot, a partner in a Surrey company, had denied invoicing Tanion.

Mr. Hollis said that both Clowes, an electrical engineer, and Tatbot, a partner in a Surrey company, had denied invoicing Tanion.

Mr. Hollis said that both Clowes, an electrical engineer, and Tatbot, a partner in a Surrey company, had denied invoicing Tanion.

Mr. Hollis said that both Clowes, an electrical engineer, and Tatbot, a partner in a Surrey company, had denied invoicing Tanion.

Mr. Hollis said that both Clowes, an electrical engineer, and Tatbot, a partner in a Surrey company, had denied invoicing Tanion.

Mr. Hollis said that both Clowes, an electrical engineer, and Tatbot, a partner in a Surrey company, had denied invoicing Tanion.

Mr. Hollis said that both Clowes, an electrical engineer, and Tatbot, a partner in a Surrey company, had denied invoicing Tanion.

Mr. Hollis said that both Clowes, an electrical engineer, and Tatbot, a partner in a Surrey company, had denied invoicing Tanion.

## Chloride's battery powered recovery

BY TERRY DODSWORTH

WHAT DO EXIDE and Dagenite show results up to £3.6m. as batteries have in common, beside the ability to start your car? I should be surprised if the average newspaper reader knew the fortunes of one division of the parent company. Until the couple of weeks ago this was known as Electric Power Storage, a group of factories producing lead acid batteries and contributing about 35 per cent of Chloride's total turnover.

Chloride, which launched a £3m. bid for Oldham International yesterday, is only just coming out of the shell which has masked its growth into a £70m-turnover giant. Yet it makes a very important product. The secondary—or "rechargeable"—battery (not to be confused with the type you throw away) is used in almost anything that can move, from a car to a forklift truck. It also stands guard over thousands of heavy power consuming plants which would not afford a prolonged break in the main supply.

To-day, Chloride makes these batteries in more than 30 countries spread throughout the globe. You do not have to look very far to find the reasons for Chloride's difference about itself. First, it belongs to a conservative industry, where, in the words of one manager, caution has become ingrained because it used to take 20 years to prove if a battery was any good. Secondly, in the past 10 years, while turnover has lifted from £30m. to £70.7m., earnings in the latter years of the 60's pre-tax profits hit a plateau at around the £3m. mark, and earnings per share remained stuck at around 4.5p.

Chloride believes it is now slightly better off than half of EPS's through this difficult patch. Last year pre-tax profits went up to £4.9m., and this year's interim results, announced yesterday, to shake EPS out of this rut.

At the beginning of this month EPS was "diversified" into three operating companies on the lines of its three basic operations. It means that EPS's previously centralised management at Clifton, near Manchester, has been split up. There will be one company concentrating on automotive batteries (Chloride Automotive Batteries), one on industrial batteries (Chloride Industrial Batteries), and one on material and components supply (Chloride Supplies). Each of the new companies will have its own management, based at Clifton, although there is another production site at Dagenham.

For some years EPS, Chloride's largest contributor to turnover, has been the sick man of the group. Although the company is cagey about figures, it seems that the automotive side—which contributes more than half of EPS's turnover—has scarcely made any money at all. sales forces and design teams of the three original independents latched on to divisionalisation. The work

At the beginning of this month EPS was "diversified" into three operating companies on the lines of its three basic operations. It means that EPS's previously centralised management at Clifton, near Manchester, has been split up. There will be one company concentrating on automotive batteries (Chloride Automotive Batteries), one on industrial batteries (Chloride Industrial Batteries), and one on material and components supply (Chloride Supplies). Each of the new companies will have its own management, based at Clifton, although there is another production site at Dagenham.

For some years EPS, Chloride's largest contributor to turnover, has been the sick man of the group. Although the company is cagey about figures, it seems that the automotive side—which contributes more than half of EPS's turnover—has scarcely made any money at all. sales forces and design teams of the three original independents latched on to divisionalisation. The work

For some years EPS, Chloride's largest contributor to turnover, has been the sick man of the group. Although the company is cagey about figures, it seems that the automotive side—which contributes more than half of EPS's turnover—has scarcely made any money at all. sales forces and design teams of the three original independents latched on to divisionalisation. The work

For some years EPS, Chloride's largest contributor to turnover, has been the sick man of the group. Although the company is cagey about figures, it seems that the automotive side—which contributes more than half of EPS's turnover—has scarcely made any money at all. sales forces and design teams of the three original independents latched on to divisionalisation. The work

For some years EPS, Chloride's largest contributor to turnover, has been the sick man of the group. Although the company is cagey about figures, it seems that the automotive side—which contributes more than half of EPS's turnover—has scarcely made any money at all. sales forces and design teams of the three original independents latched on to divisionalisation. The work

For some years EPS, Chloride's largest contributor to turnover, has been the sick man of the group. Although the company is cagey about figures, it seems that the automotive side—which contributes more than half of EPS's turnover—has scarcely made any money at all. sales forces and design teams of the three original independents latched on to divisionalisation. The work

For some years EPS, Chloride's largest contributor to turnover, has been the sick man of the group. Although the company is cagey about figures, it seems that the automotive side—which contributes more than half of EPS's turnover—has scarcely made any money at all. sales forces and design teams of the three original independents latched on to divisionalisation. The work

For some years EPS, Chloride's largest contributor to turnover, has been the sick man of the group. Although the company is cagey about figures, it seems that the automotive side—which contributes more than half of EPS's turnover—has scarcely made any money at all. sales forces and design teams of the three original independents latched on to divisionalisation. The work

For some years EPS, Chloride's largest contributor to turnover, has been the sick man of the group. Although the company is cagey about figures, it seems that the automotive side—which contributes more than half of EPS's turnover—has scarcely made any money at all. sales forces and design teams of the three original independents latched on to divisionalisation. The work

For some years EPS, Chloride's largest contributor to turnover, has been the sick man of the group. Although the company is cagey about figures, it seems that the automotive side—which contributes more than half of EPS's turnover—has scarcely made any money at all. sales forces and design teams of the three original independents latched on to divisionalisation. The work

For some years EPS, Chloride's largest contributor to turnover, has been the sick man of the group. Although the company is cagey about figures, it seems that the automotive side—which contributes more than half of EPS's turnover—has scarcely made any money at all. sales forces and design teams of the three original independents latched on to divisionalisation. The work

For some years EPS, Chloride's largest contributor to turnover, has been the sick man of the group. Although the company is cagey about figures, it seems that the automotive side—which contributes more than half of EPS's turnover—has scarcely made any money at all. sales forces and design teams of the three original independents latched on to divisionalisation. The work

For some years EPS, Chloride's largest contributor to turnover, has been the sick man of the group. Although the company is cagey about figures, it seems that the automotive side—which contributes more than half of EPS's turnover—has scarcely made any money at all. sales forces and design teams of the three original independents latched on to divisionalisation. The work

For some years EPS, Chloride's largest contributor to turnover, has been the sick man of the group. Although the company is cagey about figures, it seems that the automotive side—which contributes more than half of EPS's turnover—has scarcely made any money at all. sales forces and design teams of the three original independents latched on to divisionalisation. The work

For some years EPS, Chloride's largest contributor to turnover, has been the sick man of the group. Although the company is cagey about figures, it seems that the automotive side—which contributes more than half of EPS's turnover—has scarcely made any money at all. sales forces and design teams of the three original independents latched on to divisionalisation. The work

For some years EPS, Chloride's largest contributor to turnover, has been the sick man of the group. Although the company is cagey about figures, it seems that the automotive side—which contributes more than half of EPS's turnover—has scarcely made any money at all. sales forces and design teams of the three original independents latched on to divisionalisation. The work

For some years EPS, Chloride's largest contributor to turnover, has been the sick man of the group. Although the company is cagey about figures, it seems that the automotive side—which contributes more than half of EPS's turnover—has scarcely made any money at all. sales forces and design teams of the three original independents latched on to divisionalisation. The work

For some years EPS, Chloride's largest contributor to turnover, has been the sick man of the group. Although the company is cagey about figures, it seems that the automotive side—which contributes more than half of EPS's turnover—has scarcely made any money at all. sales forces and design teams of the three original independents latched on to divisionalisation. The work

For some years EPS, Chloride's largest contributor to turnover, has been the sick man of the group. Although the company is cagey about figures, it seems that the automotive side—which contributes more than half of EPS's turnover—has scarcely made any money at all. sales forces and design teams of the three original independents latched on to divisionalisation. The work

For some years EPS, Chloride's largest contributor to turnover, has been the sick man of the group. Although the company is cagey about figures, it seems that the automotive side—which contributes more than half of EPS's turnover—has scarcely made any money at all. sales forces and design teams of the three original independents latched on to divisionalisation. The work

For some years EPS, Chloride's largest contributor to turnover, has been the sick man of the group. Although the company is cagey about figures, it seems that the automotive side—which contributes more than half of EPS's turnover—has scarcely made any money at all. sales forces and design teams of the three original independents latched on to divisionalisation. The work

For some years EPS, Chloride's largest contributor to turnover, has been the sick man of the group. Although the company is cagey about figures, it seems that the automotive side—which contributes more than half of EPS's turnover—has scarcely made any money at all. sales forces and design teams of the three original independents latched on to divisionalisation. The work

For some years EPS, Chloride's largest contributor to turnover, has been the sick man of the group. Although the company is cagey about figures, it seems that the automotive side—which contributes more than half of EPS's turnover—has scarcely made any money at all. sales forces and design teams of the three original independents latched on to divisionalisation. The work

For some years EPS, Chloride's largest contributor to turnover, has been the sick man of the group. Although the company is cagey about figures, it seems that the automotive side—which contributes more than half of EPS's turnover—has scarcely made any money at all. sales forces and design teams of the three original independents latched on to divisionalisation. The work

For some years EPS, Chloride's largest contributor to turnover, has been the sick man of the group. Although the company is cagey about figures, it seems that the automotive side—which contributes more than half of EPS's turnover—has scarcely made any money at all. sales forces and design teams of the three original independents latched on to divisionalisation. The work

For some years EPS, Chloride's largest contributor to turnover, has been the sick man of the group. Although the company is cagey about figures, it seems that the automotive side—which contributes more than half of EPS's turnover—has scarcely made any money at all. sales forces and design teams of the three original independents latched on to divisionalisation. The work

For some years EPS, Chloride's largest contributor to turnover, has been the sick man of the group. Although the company is cagey about figures, it seems that the automotive side—which contributes more than half of EPS's turnover—has scarcely made any money at all. sales forces and design teams of the three original independents latched on to divisionalisation. The work

For some years EPS, Chloride's largest contributor to turnover, has been the sick man of the group. Although the company is cagey about figures, it seems that the automotive side—which contributes more than half of EPS's turnover—has scarcely made any money at all. sales forces and design teams of the three original independents latched on to divisionalisation. The work

For some years EPS, Chloride's largest contributor to turnover, has been the sick man of the group. Although the company is cagey about figures, it seems that the automotive side—which contributes more than half of EPS's turnover—has scarcely made any money at all. sales forces and design teams of the three original independents latched on to divisionalisation. The work

For some years EPS, Chloride's largest contributor to turnover, has been the sick man of the group. Although the company is cagey about figures, it seems that the automotive side—which contributes more than half of EPS's turnover—has scarcely made any money at all. sales forces and design teams of the three original independents latched on to divisionalisation. The work

For some years EPS, Chloride's largest contributor to turnover, has been the sick man of the group. Although the company is cagey about figures, it seems that the automotive side—which contributes more than half of EPS's turnover—has scarcely made any money at all. sales forces and design teams of the three original independents latched on to divisionalisation. The work

For some years EPS, Chloride's largest contributor to turnover, has been the sick man of the group. Although the company is cagey about figures, it seems that the automotive side—which contributes more than half of EPS's turnover—has scarcely made any money at all. sales forces and design teams of the three original independents latched on to divisionalisation. The work

To the outsider, this paring force has been lopped from 6,000 to 4,500, the product line reduced from 400 to 120, and the Baker well plant in Derbyshire closed. All this has involved heavy costs in redundancy payments. At Clifton and Dagenham a bigly unusual productivity deal has been negotiated, which has effectively swept away the complex wages incentive schemes, and virtually eliminated job demarcation.

Most companies would have found this a big enough mouthful to digest in the time EPS allowed itself. But by the beginning of this year, with profits still falling to come through, a strong body of opinion was developing within EPS towards divisionalisation in spite of the disruption that entailed. This made it all the easier for Powell to put in one of his more forceful young executives, Michael Edwards, as chief executive at EPS.

Edwards, with his concept of cutting jobs down to size, quickly latched on to divisionalisation. Chloride's drive into Europe.

Edwards, with his concept of cutting jobs down to size, quickly latched on to divisionalisation. Chloride's drive into Europe.

Edwards, with his concept of cutting jobs down to size, quickly latched on to divisionalisation. Chloride's drive into Europe.

Edwards, with his concept of cutting jobs down to size, quickly latched on to divisionalisation. Chloride's drive into Europe.

Edwards, with his concept of cutting jobs down to size, quickly latched on to divisionalisation. Chloride's drive into Europe.

Edwards, with his concept of cutting jobs down to size, quickly latched on to divisionalisation. Chloride's drive into Europe.

Edwards, with his concept of cutting jobs down to size, quickly latched on to divisionalisation. Chloride's drive into Europe.

Edwards, with his concept of cutting jobs down to size, quickly latched on to divisionalisation. Chloride's drive into Europe.

Edwards, with his concept of cutting jobs down to size, quickly latched on to divisionalisation. Chloride's drive into Europe.

Edwards, with his concept of cutting jobs down to size, quickly latched on to divisionalisation. Chloride's drive into Europe.

Edwards, with his concept of cutting jobs down to size, quickly latched on to divisionalisation. Chloride's drive into Europe.

Edwards, with his concept of cutting jobs down to size, quickly latched on to divisionalisation. Chloride's drive into Europe.

Edwards, with his concept of cutting jobs down to size, quickly latched on to divisionalisation. Chloride's drive into Europe.

Edwards, with his concept of cutting jobs down to size, quickly latched on to divisionalisation. Chloride's drive into Europe.

Edwards, with his concept of cutting jobs down to size, quickly latched on to divisionalisation. Chloride's drive into Europe.

Edwards, with his concept of cutting jobs down to size, quickly latched on to divisionalisation. Chloride's drive into Europe.

Edwards, with his concept of cutting jobs down to size, quickly latched on to divisionalisation. Chloride's drive into Europe.

Edwards, with his concept of cutting jobs down to size, quickly latched on to divisionalisation. Chloride's drive into Europe.

Edwards, with his concept of cutting jobs down to size, quickly latched on to divisionalisation. Chloride's drive into Europe.

Edwards, with his concept of cutting jobs down to size, quickly latched on to divisionalisation. Chloride's drive into Europe.

Edwards, with his concept of cutting jobs down to size, quickly latched on to divisionalisation. Chloride's drive into Europe.

Edwards, with his concept of cutting jobs down to size, quickly latched on to divisionalisation. Chloride's drive into Europe.

Edwards, with his concept of cutting jobs down to size, quickly latched on to divisionalisation. Chloride's drive into Europe.

Edwards, with his concept of cutting jobs down to size, quickly latched on to divisionalisation. Chloride's drive into Europe.

Edwards, with his concept of cutting jobs down to size, quickly latched on to divisionalisation. Chloride's drive into Europe.

Edwards, with his concept of cutting jobs down to size, quickly latched on to divisionalisation. Chloride's drive into Europe.

Edwards, with his concept of cutting jobs down to size, quickly latched on to divisionalisation. Chloride's drive into Europe.

Edwards, with his concept of cutting jobs down to size, quickly latched on to divisionalisation. Chloride's drive into Europe.

Edwards, with his concept of cutting jobs down to size, quickly latched on to divisionalisation. Chloride's drive into Europe.

Edwards, with his concept of cutting jobs down to size, quickly latched on to divisionalisation. Chloride's drive into Europe.

Edwards, with his concept of cutting jobs down to size, quickly latched on to divisionalisation. Chloride's drive into Europe.

Edwards, with his concept of cutting jobs down to size, quickly latched on to divisionalisation. Chloride's drive into Europe.

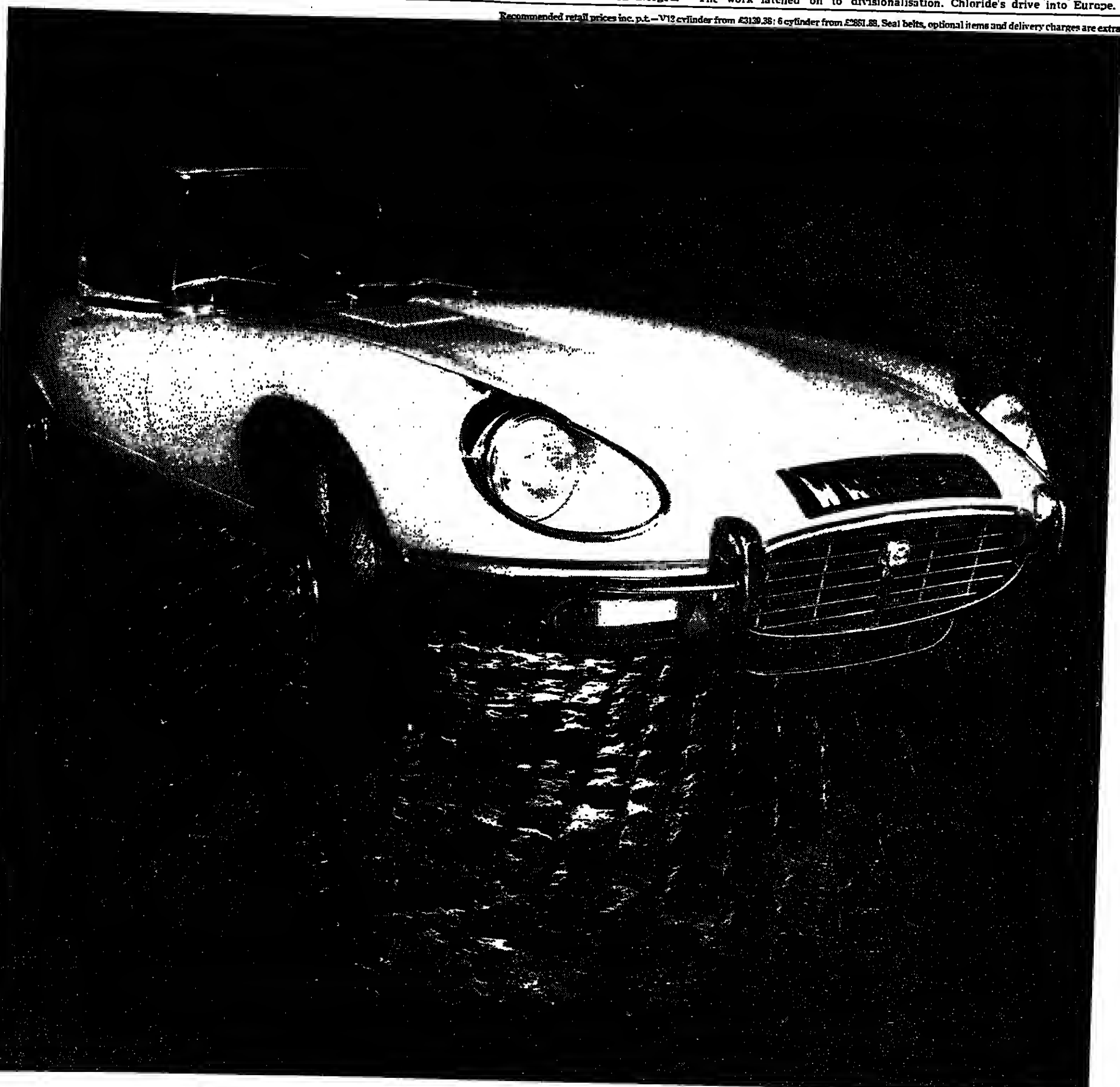
Edwards, with his concept of cutting jobs down to size, quickly latched on to divisionalisation. Chloride's drive into Europe.

Edwards, with his concept of cutting jobs down to size, quickly latched on to divisionalisation. Chloride's drive into Europe.

Edwards, with his concept of cutting jobs down to size, quickly latched on to divisionalisation. Chloride's drive into Europe.

Edwards, with his concept of cutting jobs down to size, quickly latched on to divisionalisation. Chloride's drive into Europe.

Edwards, with his concept of cutting jobs down to size, quickly latched on to divisionalisation. Chloride's drive into Europe.



## The most important event of the 1971 motor show happened last March.

Now that you're getting your first look at other new cars, we think it's worth taking a second look at the new Series 3 E-type V12. It's a very exclusive car.

The only other V12s you can buy are Ferrari or Lamborghini. And they start at more than double the price of ours.

The balance of 12 cylinders in V formation gives incredibly smooth performance. In top gear you can go from 40 to 60 mph in 5.2 seconds; 50 to 70 mph in 5.45.

All of which count when overtaking.

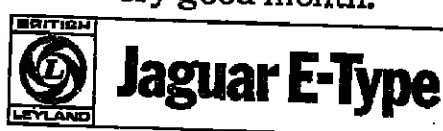
Through the gears, our 5.3 litre V12 will take you from 0 to 70 mph in just 8.45 seconds. And that's still less than half the possible maximum speed.

We give you a choice between automatic or manual transmission. In 2+2 fixed head coupe—or open 2 seater.

Whichever you choose, there's a wider track for even better roadholding. Anti-diver front suspension for even greater

control. Ventilated disc brakes for even safer braking. And a standard of comfort and quietness that would do most luxury saloons proud.

When we popped the champagne corks to launch our new E-type, everybody said March was a very good month.



Jaguar Cars Limited, Coventry.

## Hutchison International Limited

(Incorporated in the Colony of Hong Kong)

### Record Profits and Increased Dividend

Extracts from the Statement of Sir Douglas Clague, C.B.E., M.C., F.R.S., T.D., Chairman, on the Accounts for the year ended 31st March 1971.

#### ACCOUNTS AND DIVIDEND

Net profit after tax for the year to 31st March 1971 increased 7.5% to a record £4,015,485 (HK\$58,345,000 converted at 14.53) and results for the current year are well up to expectations.

Estimated consolidated group profit £4,631,796 (HK\$67,300,000) less attributable minority shareholders \$584,997 (HK\$8,500,000) is £4,046,800 (HK\$58,800,000).

The directors recommended a bonus issue of two ordinary shares for every twenty five ordinary shares held and one ordinary share for every twenty five preference shares held. Simultaneously they will make a rights issue of four new ordinary shares for every twenty five ordinary shares held and one new ordinary share for each preference share held at 17th October 1971. Rights will be issued at HK\$24 per share.

The final dividend declared of 75 cents per share makes a total of HK\$1.35 (1969/70 HK\$1.05) which is covered 2.8 times. Additionally a first interim dividend of 25 cents per share is declared for the current year. The new bonus and rights issue will not be entitled to this interim but otherwise rank pari passu with existing shares.

The directors anticipate that the second interim dividend and the final dividend for the year ending 31st March 1972 on the capital as increased by the bonus and rights issues will total not less than the corresponding dividends for the year now under review.

The results were substantially improved by an increase of dividends from subsidiary companies, higher interest receipts, and a profit of £1,117,343 on the sale of investments. The market value of direct investments in quoted companies is approximately \$44,322,000 with a book value of \$19,958,000.

#### GENERAL

H.I.L. having expanded considerably has streamlined its administration, forming eight divisions including a newly created finance and investment group which is led by a team with extensive experience in banking.

New developments include entry into containerisation depot development through associated companies as well as a minority holding (12%) in conjunction with Modern Terminals Ltd. and a major hotel project. Work on the cross-harbour tunnel, in which the company has a 29.5% equity interest, proceeds satisfactorily and should be completed and in use during 1972.

New projects also include modest commercial investments in Singapore, Thailand, Indonesia and Mauritius as well as some rather larger commercial investments in Australia.

#### PROSPECTS

H.I.L. faces the future with great confidence, and the momentum generated should ensure a steady annual addition of recurring income with opportunities to take capital profits and make further investments.

Copies of the Statement can be obtained from:  
JOHN D. HUTCHISON (U.K.) LIMITED,  
43-45 CRUTCHED FRIARS, LONDON, EC3N 2DD.



# JOHANNESBURG CONSOLIDATED INVESTMENT COMPANY, LIMITED GROUP

(All Companies mentioned are incorporated in the Republic of South Africa)

Office of the London Secretaries: 10/11, Austin Friars, London EC2N 2EY

## MINING COMPANIES' REPORTS FOR THE QUARTER ENDED 30th SEPTEMBER, 1971 WITH COMPARATIVE FIGURES FOR THE PREVIOUS QUARTER

## U.K. in new nuclear pact on spent fuel reprocessing

BY DAVID FISHLOCK, SCIENCE EDITOR

ANOTHER TRIPARTITE nuclear pact, this time covering the reprocessing of spent nuclear fuel, was signed in Frankfurt yesterday.

Britain, France and West Germany have agreed to pool their fuel reprocessing capacity in a way that will minimise the risk in the future of overcapacity in Europe.

### Equal shares

As with the gas centrifuge pact, the three nations in the "club" have equal shares in a new company, United Reprocessors, based in Frankfurt. This company will market the reprocessing of irradiated oxide fuels, and also handle associated services such as transport and the conversion of uranyl nitrate to uranium hexafluoride.

The share capital of United Reprocessors is divided between British Nuclear Fuels, the Commissariat à l'Energie Atomique, and Kerbrunn-Waldkrauf-Heilmann-Gesellschaft (KEWA). These companies have agreed to expand the capacity of, first, the British plant at Windscale and then the French plant at Haguenau to roughly 600 tonnes a year. This will provide enough reprocessing capacity to meet Europe's demands until the late 1970s.

Then W. Germany is expected to construct a new reprocessing

### President

No decision has yet been reached on the future of Eurchem, a small reprocessing facility of the European Nuclear Energy Agency (ENEA) in Belgium. France and W. Germany also have shares in this plant. It could find a future in the reprocessing of special fuels from research reactors.

The first president of United Reprocessors will be M. Giraud, director general of CEA, and the chairman of the Board will be Mr. Con Alday, a managing director of British Nuclear Fuels.

The manager of the company will be Dr. F. Zübke.

## Clydeside firms hurt by Special provisions

BY ANDREW HARGRAVE, SCOTTISH CORRESPONDENT

GLASGOW, Oct. 12.

THE NEW Special Development Areas provisions for Clydeside are seen as a positive disincentive to expansion by local companies in local expansion. The survey carried out jointly by the Ayrshire Chamber of Industry and the Confederation of British Industry in Scotland.

Half the companies planning expansion (about two-thirds of those participating in the survey which is published here today), intend to site new developments outside Scotland. This tendency, the survey adds, is being confirmed by a separate inquiry at present being carried out by the Scottish Office and the CBI among industrial estates' corporation tenants.

Although no new enterprise had moved in to the Ayrshire portion of the SDA in the past eight months, the new package, including 10 per cent extra building grants and the 30 per cent payroll subsidy (available only to employers) is "seen as distorting wages structures and price patterns in an unhealthy manner."

"Nothing has been done to encourage the development and diversification or expansion of established industry," the survey complains. "Potential increases in the number of jobs which might be available from developments of existing companies is ignored."

The main reason for siting expansion outside Scotland appears

### More contracts

It suggests as a "potent stimulus to industry already in the area more Government contracts even if these were slightly more expensive. "By doing so the Government would be encouraging existing companies to expand and present suppliers would be influenced to set up manufacturing units in the area."

A big proportion of the response to the inquiry also indicated that their past investments had been "strongly influenced" by investment grants, now abolished in favour of tax allowances. The survey suggests a reappraisal and a possible reintroduction of the grants, perhaps on a selective basis.

Overall, the survey recommends an examination of incentives and their relation to job creation, profitability and investment, regardless of whether the companies are inside or outside the area, and also some help towards meeting the transport differential.

## Isle of Man needs new boost says report

TOURISM, the Isle of Man's main industry, will face economic adversity in the coming decade, the international competition, this decade and may cease to be the island's highest source of income. This is the principal warning contained in a report published yesterday on the first economic survey to be made of the island.

Concern is expressed at the growth potential of the other major industries—agriculture and manufacturing.

The report makes recommendations for the economic activity and stresses that opportunity exists for promoting the island as a tax haven for the wealthy; a new element should be introduced into the economy such as a university; and the island should retain its sovereignty over the rate at which it levies taxes, should it go into the Common Market.

The major factors in the Manx economy have been compiled, reported, and analysed by PA Management Consultants, of London.

An action plan has been drawn up of short- and long-term recommendations for widening the base of the economy and adapting it to the demands of the Common Market entry, and growing trend in Britain towards greater economic autonomy in the regions.

Members are now advised that pursuant to a recommendation by the companies' technical advisers, the directors of the company have agreed a basis for the purchase by Hartbeestfontein of the undertaking of Zandpan. Formal application has been made to the State for its approval.

The directors propose that the consideration will be R15,150,000 to be satisfied by Hartbeestfontein assuming the liability to repay Zandpan's existing loans of R8,000,000 and Hartbeestfontein issuing to Zandpan 2,200,000 ordinary shares of R1 each credited as fully paid (equivalent to a ratio of approximately 5.9 Zandpan shares for each Hartbeestfontein share) for the balance of R7,150,000.

Members will be advised further and meetings of members convened to consider the proposals, full details of which will be circulated, when the State has indicated whether the application will be approved.

By Order of the Boards

ANGLO-TRANSVAAL TRUSTEES LTD.

London Secretaries,

F. G. T. Jones,

Secretary,

London Office:

295, Regent Street,

London, W1R 8ST,

12th October, 1971.

Registered Office:

Anglovaal House,

56, Main Street,

Johannesburg.

HARTEBEESTFONTEIN GOLD MINING COMPANY LIMITED

ZANDPAN GOLD MINING COMPANY LIMITED

(Both Companies Incorporated in the Republic of South Africa)

ACQUISITION BY HARTEBEESTFONTEIN OF THE ZANDPAN MINE

Members are now advised that pursuant to a recommendation by the companies' technical advisers, the directors of the company have agreed a basis for the purchase by Hartbeestfontein of the undertaking of Zandpan. Formal application has been made to the State for its approval.

The directors propose that the consideration will be R15,150,000 to be satisfied by Hartbeestfontein assuming the liability to repay Zandpan's existing loans of R8,000,000 and Hartbeestfontein issuing to Zandpan 2,200,000 ordinary shares of R1 each credited as fully paid (equivalent to a ratio of approximately 5.9 Zandpan shares for each Hartbeestfontein share) for the balance of R7,150,000.

Members will be advised further and meetings of members convened to consider the proposals, full details of which will be circulated, when the State has indicated whether the application will be approved.

By Order of the Boards

ANGLO-TRANSVAAL TRUSTEES LTD.

London Secretaries,

F. G. T. Jones,

Secretary,

London Office:

295, Regent Street,

London, W1R 8ST,

12th October, 1971.

Registered Office:

Anglovaal House,

56, Main Street,

Johannesburg.

HARTEBEESTFONTEIN GOLD MINING COMPANY LIMITED

ZANDPAN GOLD MINING COMPANY LIMITED

(Both Companies Incorporated in the Republic of South Africa)

ACQUISITION BY HARTEBEESTFONTEIN OF THE ZANDPAN MINE

Members are now advised that pursuant to a recommendation by the companies' technical advisers, the directors of the company have agreed a basis for the purchase by Hartbeestfontein of the undertaking of Zandpan. Formal application has been made to the State for its approval.

The directors propose that the consideration will be R15,150,000 to be satisfied by Hartbeestfontein assuming the liability to repay Zandpan's existing loans of R8,000,000 and Hartbeestfontein issuing to Zandpan 2,200,000 ordinary shares of R1 each credited as fully paid (equivalent to a ratio of approximately 5.9 Zandpan shares for each Hartbeestfontein share) for the balance of R7,150,000.

Members will be advised further and meetings of members convened to consider the proposals, full details of which will be circulated, when the State has indicated whether the application will be approved.

By Order of the Boards

ANGLO-TRANSVAAL TRUSTEES LTD.

London Secretaries,

F. G. T. Jones,

Secretary,

London Office:

295, Regent Street,

London, W1R 8ST,

12th October, 1971.

Registered Office:

Anglovaal House,

56, Main Street,

Johannesburg.

HARTEBEESTFONTEIN GOLD MINING COMPANY LIMITED

ZANDPAN GOLD MINING COMPANY LIMITED

(Both Companies Incorporated in the Republic of South Africa)

ACQUISITION BY HARTEBEESTFONTEIN OF THE ZANDPAN MINE

Members are now advised that pursuant to a recommendation by the companies' technical advisers, the directors of the company have agreed a basis for the purchase by Hartbeestfontein of the undertaking of Zandpan. Formal application has been made to the State for its approval.

The directors propose that the consideration will be R15,150,000 to be satisfied by Hartbeestfontein assuming the liability to repay Zandpan's existing loans of R8,000,000 and Hartbeestfontein issuing to Zandpan 2,200,000 ordinary shares of R1 each credited as fully paid (equivalent to a ratio of approximately 5.9 Zandpan shares for each Hartbeestfontein share) for the balance of R7,150,000.

Members will be advised further and meetings of members convened to consider the proposals, full details of which will be circulated, when the State has indicated whether the application will be approved.

By Order of the Boards

ANGLO-TRANSVAAL TRUSTEES LTD.

London Secretaries,

F. G. T. Jones,

Secretary,

London Office:

295, Regent Street,

London, W1R 8ST,

12th October, 1971.

Registered Office:

Anglovaal House,

56, Main Street,

Johannesburg.

HARTEBEESTFONTEIN GOLD MINING COMPANY LIMITED

ZANDPAN GOLD MINING COMPANY LIMITED

(Both Companies Incorporated in the Republic of South Africa)

ACQUISITION BY HARTEBEESTFONTEIN OF THE ZANDPAN MINE

Members are now advised that pursuant to a recommendation by the companies' technical advisers, the directors of the company have agreed a basis for the purchase by Hartbeestfontein of the undertaking of Zandpan. Formal application has been made to the State for its approval.

The directors propose that the consideration will be R15,150,000 to be satisfied by Hartbeestfontein assuming the liability to repay Zandpan's existing loans of R8,000,000 and Hartbeestfontein issuing to Zandpan 2,200,000 ordinary shares of R1 each credited as fully paid (equivalent to a ratio of approximately 5.9 Zandpan shares for each Hartbeestfontein share) for the balance of R7,150,000.

Members will be advised further and meetings of members convened to consider the proposals, full details of which will be circulated, when the State has indicated whether the application will be approved.

By Order of the Boards

ANGLO-TRANSVAAL TRUSTEES LTD.

London Secretaries,

F. G. T. Jones,

Secretary,

London Office:

295, Regent Street,

London, W1R 8ST,

12th October, 1971.

Registered Office:

Anglovaal House,

56, Main Street,

Johannesburg.

HARTEBEESTFONTEIN GOLD MINING COMPANY LIMITED

ZANDPAN GOLD MINING COMPANY LIMITED

(Both Companies Incorporated in the Republic of South Africa)

ACQUISITION BY HARTEBEESTFONTEIN OF THE ZANDPAN MINE

Members are now advised that pursuant to a recommendation by the companies' technical advisers, the directors of the company have agreed a basis for the purchase by Hartbeestfontein of the undertaking of Zandpan. Formal application has been made to the State for its approval.

The directors propose that the consideration will be R15,150,000 to be satisfied by Hartbeestfontein assuming the liability to repay Zandpan's existing loans of R8,000,000 and Hartbeestfontein issuing to Zandpan 2,200,000 ordinary shares of R1 each credited as fully paid (equivalent to a ratio of approximately 5.9 Zandpan shares for each Hartbeestfontein share) for the balance of R7,150,000.

Members will be advised further and meetings of members convened to consider the proposals, full details of which will be circulated, when the State has indicated whether the application will be approved.

By Order of the Boards

ANGLO-TRANSVAAL TRUSTEES LTD.

London Secretaries,

F. G. T. Jones,

Secretary,

London Office:

295, Regent Street,

London, W1R 8ST,

12th October, 1971.

Registered Office:

Anglovaal House,

56, Main Street,

Johannesburg.

HARTEBEESTFONTEIN GOLD MINING COMPANY LIMITED

ZANDPAN GOLD MINING COMPANY LIMITED

(Both Companies Incorporated in the Republic of South Africa)

ACQUISITION BY HARTEBEESTFONTEIN OF THE ZANDPAN MINE

Members are now advised that pursuant to a recommendation by the companies' technical advisers, the directors of the company have agreed a basis for the purchase by Hartbeestfontein of the undertaking of Zandpan. Formal application has been made to the State for its approval.

The directors propose that the consideration will be R15,150,000 to be satisfied by Hartbeestfontein assuming the liability to repay Zandpan's existing loans of R8,000,000 and Hartbeestfontein issuing to Zandpan 2,200,000 ordinary shares of R1 each credited as fully paid (equivalent to a ratio of approximately 5.9 Zandpan shares for each Hartbeestfontein share) for the balance of R7,150,000.

Members will be advised further and meetings of members convened to consider the proposals, full details of which will be circulated, when the State has indicated whether the application will be approved.

By Order of the Boards

ANGLO-TRANSVAAL TRUSTEES LTD.

London Secretaries,

F. G. T. Jones,

Secretary,

London Office:

295, Regent Street,

London, W1R 8ST,

12th October, 1971.

Registered Office:

Anglovaal House,

56, Main Street,

Johannesburg.

HARTEBEESTFONTEIN GOLD MINING COMPANY LIMITED

ZANDPAN GOLD MINING COMPANY LIMITED

(Both Companies Incorporated in the Republic of South Africa)

ACQUISITION BY HARTEBEESTFONTEIN OF THE ZANDPAN MINE

Members are now advised that pursuant to a recommendation by the companies' technical advisers, the directors of the company have agreed a basis for the purchase by Hartbeestfontein of the undertaking of Zandpan. Formal application has been made to the State for its approval.

The directors propose that the consideration will be R15,150,000 to be satisfied by Hartbeestfontein assuming the liability to repay Zandpan's existing loans of R8,000,000 and Hartbeestfontein issuing to Zandpan 2,200,000 ordinary shares of R1 each credited as fully paid (equivalent to a ratio of approximately 5.9 Zandpan shares for each Hartbeestfontein share) for the balance of R7,150,000.

Members will be advised further and meetings of members convened to consider the proposals, full details of which will be circulated, when the State has indicated whether the application will be approved.

By Order of the Boards

ANGLO-TRANSVAAL TRUSTEES LTD.

London Secretaries,

F. G. T. Jones,

Secretary,

London Office:

295, Regent Street,

London, W1R 8ST,

12th October, 1971.

Registered Office:

Anglovaal House,

56, Main Street,

Johannesburg.

HARTEBEESTFONTEIN GOLD MINING COMPANY LIMITED

ZANDPAN GOLD MINING COMPANY LIMITED

(Both Companies Incorporated in the Republic of South Africa)

ACQUISITION BY HARTEBEESTFONTEIN OF THE ZANDPAN MINE

Members are now advised that pursuant to a recommendation by the companies' technical advisers, the directors of the company have agreed a basis for the purchase by Hartbeestfontein of the undertaking of Zandpan. Formal application has been made to the State for its approval.

The directors propose that the consideration will be R15,150,000 to be satisfied by Hartbeestfontein assuming the liability to repay Zandpan's existing loans of R8,000,000 and Hartbeestfontein issuing to Zandpan 2,200,000 ordinary shares of R1 each credited as fully paid (equivalent to a ratio of approximately 5.9 Zandpan shares for each Hartbeestfontein share) for the balance of R7,150,000.

Members will be advised further and meetings of members convened to consider the proposals, full details of which will be circulated, when the State has indicated whether the application will be approved.

By Order of the Boards

ANGLO-TRANSVAAL TRUSTEES LTD.

London Secretaries,

F. G. T. Jones,

Secretary,

London Office:

295, Regent Street,

London, W1R 8ST,

12th October, 1971.

Registered Office:

Anglovaal House,

56, Main Street,

Johannesburg.

HARTEBEESTFONTEIN GOLD MINING COMPANY LIMITED

ZANDPAN GOLD MINING COMPANY LIMITED

(Both Companies Incorporated in the Republic of South Africa)

ACQUISITION BY HARTEBEESTFONTEIN OF THE ZANDPAN MINE

Members are now advised that pursuant to a recommendation by the companies' technical advisers, the directors of the company have agreed a basis for the purchase by Hartbeestfontein of the undertaking of Zandpan. Formal application has been made to the State for its approval.

The directors propose that the consideration will be R15,150,000 to be satisfied by Hartbeestfontein assuming the liability to repay Zandpan's existing loans of R8,000,000 and Hartbeestfontein issuing to Zandpan 2,200,000 ordinary shares of R1 each credited as fully paid (equivalent to a ratio of approximately 5.9 Zandpan shares for each Hartbeestfontein share) for the balance of R7,150,000.

Members will be advised further and meetings of members convened to consider the proposals, full details of which will be circulated, when the State has indicated whether the application will be approved.

By Order of the Boards

ANGLO-TRANSVAAL TRUSTEES LTD.



new nuclear  
spent  
processing

firms in  
providing

needs  
report



# The crow and the grasshoppers

A freight airline should fly as the crow flies.  
Not hop about...  
BEA Cargo is the only freight airline in Europe  
specialising on Europe alone.  
(The others are all geared for long-haul  
traffic.)  
It has more freighter services flying *direct* to  
more points in Europe than any other airline.

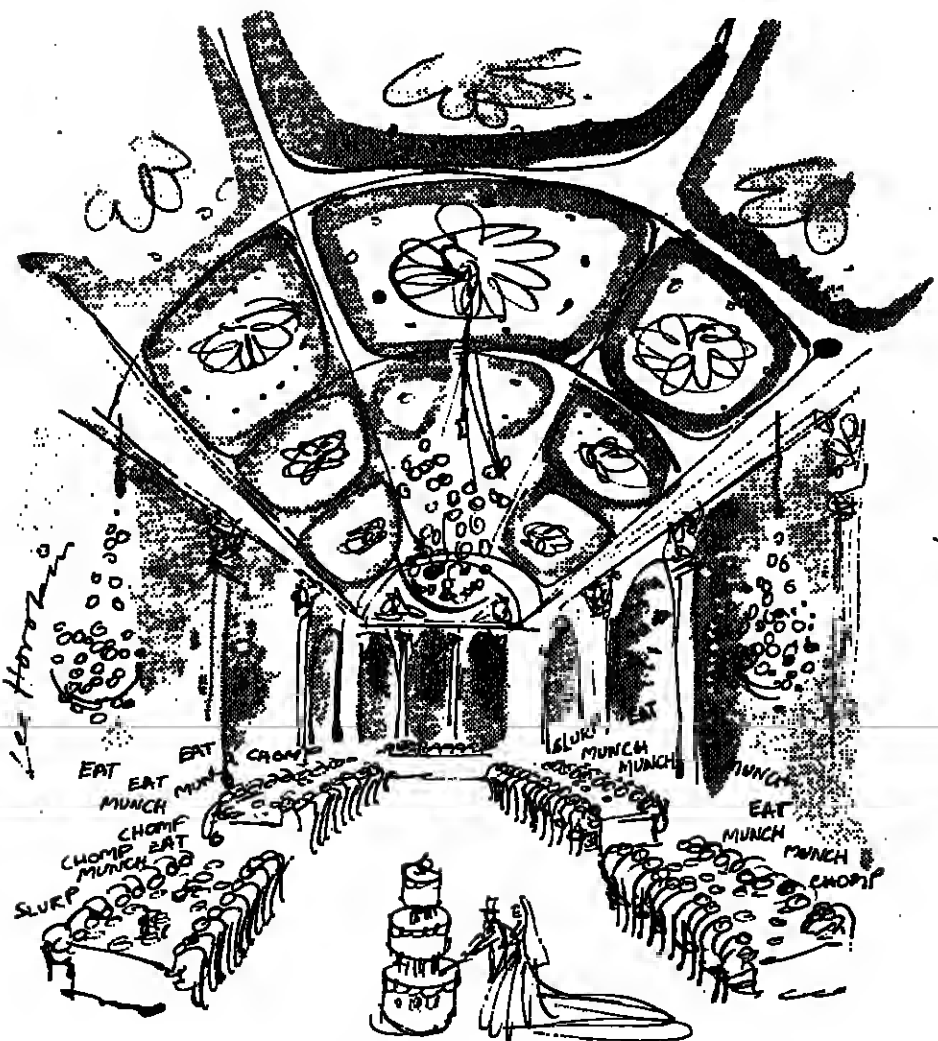
BEA flies as the crow flies. Straight there and  
straight back.  
(Other airlines often tranship their cargoes.  
Goods can wait days for another flight. Sometimes  
they even get lost.)  
Whether you're a shipper or an agent, it makes  
sense to send your freight as the crow flies — direct.  
Because you save time, and time is money.

**BEA CARGO**  
As the crow flies.





**The Halifax. For the day  
you find out just how many  
relatives you have.**



How a daughter's wedding  
can eat into your savings! And  
how glad you'll be you started to  
save with the Halifax all those  
years ago.

You don't have to tuck  
away a fortune: just a little bit

extra put aside each month will  
grow — and keep on growing —  
thanks to the interest the  
Halifax gives you.

That way you won't have to  
get solemn about the cost on the  
happiest day of her life.

**HALIFAX**  
BUILDING SOCIETY  
Member of The Building Societies Association

It's always nice to know it's there

## Thieves get away with a net £53m. in 1970

THIEVES IN Britain got away with a tax-free £53.34m. in cash and property last year, according to the annual survey by Security Gazette. Altogether £68m. was stolen during the year, but the police recovered £12.68m. The 1970 total was £3.8m. — or 6 per cent. — above the 1969 figure.

The figure included losses due to burglary, robbery and all forms of theft recorded by the police. It did not include fraud, forgery, shoplifting or other unreported or unsuspected losses. The journal said these were thought to total several hundred million pounds a year.

Just over £26m. was estimated to have been stolen in the London Metropolitan area, of which £3.2m. was recovered by police.

Other areas which suffered big losses were: South Wales (£3.57m., stolen, £2.67m. recovered); Birmingham (£3.23m. and £1.55m.); Cheshire (£2.96m. and £1.37m.); Lancashire (£2.59m. and £578,989); and Thames Valley (£2.54m. and £1.09m.).

Acceptance  
The totals included vehicles taken without the owner's consent but later retrieved. Other major theft-loss areas, whose figures did not include stolen vehicles, were West Yorkshire (£2.64m. stolen—£936,323 recovered) and Liverpool and Bootle (£1.69m. and £255,690).

Security Gazette said big-time thieves were going for larger hauls, but the police loss was because of an increase in lesser thefts and burglaries.

Commenting on the Home Secretary's intention to make some criminals give up part of their earnings as compensation for their victims, the magazine said that reflected a growing acceptance of crime.

## Improvements at Stansted Airport

Financial Times Reporter

THE British Airports Authority yesterday announced construction details of the £130,000 passenger terminal extension at Stansted Airport.

The Authority said that improvements made possible by the new development would include more check-in facilities, a bigger concourse, a new self-service duty-free shop, an enlarged departure lounge with buffet and 24-hour licensed bar, increased arrival facilities and a new arrivals concourse with provision for a bureau de change, car rental, hotel booking and similar services.

All of these shares having been sold, this announcement appears as a matter of record only.

1,181,818 Shares

## Centex Corporation

Common Stock  
(Par Value \$25 Per Share)



Merrill Lynch, Pierce, Fenner & Smith  
Incorporated

Goldman, Sachs & Co.

Eppler, Guerin & Turner, Inc.

|  |                              |  |                                 |
|--|------------------------------|--|---------------------------------|
| Blyth & Co., Inc.                      | The First Boston Corporation | Drexel Firestone                       | duPont Glare Forgan             |
| Eastman Dillon, Union Securities & Co. |                              |  | Halsey, Stuart & Co. Inc.       |
| Hornblower & Weeks-Hemphill, Noyes     |                              | Kidder, Peabody & Co.                  | Lazard Frères & Co.             |
| Lehman Brothers                        | Loeb, Rhoades & Co.          | Paine, Webber, Jackson & Curtis        | Salomon Brothers                |
| Smith, Barney & Co.                    |                              | Stone & Webster Securities Corporation | Dean Witter & Co.               |
| Bache & Co.                            |                              | Rauscher Pierce Securities Corporation | Shearson, Hammill & Co.         |
| American UBS Corporation               | Bear, Stearns & Co.          | A. G. Becker & Co.                     | Alex. Brown & Sons              |
| Burnham and Company                    |                              | CBWL-Hayden, Stone Inc.                | Clark, Dodge & Co.              |
| EuroPartners Securities Corporation    |                              | Robert Fleming                         | Hallgarten & Co.                |
| E. F. Hutton & Company Inc.            |                              | W. E. Hutton & Co.                     | Kleinwort, Benson Incorporated  |
| Ladenburg, Thalmann & Co.              | F. S. Moseley & Co.          | Paribas Corporation                    | R. W. Pressprich & Co.          |
| Reynolds Securities Inc.               | L. F. Rothschild & Co.       | Shields & Company                      | Swiss American Corporation      |
| Thomson & McKinnon Auchincloss Inc.    |                              | Spencer Trask & Co.                    | Tucker, Anthony & R. L. Day     |
| G. H. Walker & Co.                     |                              | Walston & Co., Inc.                    | Wood, Struthers & Winthrop Inc. |

**GLYNWED** is one of Britain's larger industrial groups.  
Its world is metal and the products of metal.  
It is a broadly based operation with assets  
exceeding £40,000,000.

**GLYNWED** processes metal.  
Ferrous and non-ferrous. Tubes, bars, sections, rods,  
castings, forgings. Metal for the building industry.  
Metal for the motor and other engineering trades.

# The Metalmasters

**GLYNWED** manufactures in metal.  
Domestic and heating appliances. Steel flooring  
and stairways. Catering equipment. Nuts, bolts, studs  
and many other fittings for industry.

**GLYNWED** distributes metal.  
Large stocks of nuts, bolts,  
bearings and other fittings  
stored in centres throughout  
the United Kingdom.

**GLYNWED** is the name behind the names.  
Such as Aga, Rayburn, Microbore heating, Falcon and  
Ganymede catering equipment. Leisure kitchen equipment.  
Vogue baths, basins and shower trays. Allied industrial  
boilers and Wednesbury copper tubes and fittings.

**GLYNWED**

the metalmasters

GLYNWED LIMITED • OXFORD STREET, BILSTON, STAFFS. TEL: 0902 41132.

سازمان صنعتی



## Banca Nazionale dell' Agricoltura

Head Office: ROME  
Share capital and Reserves:  
L. 12.600.000.000.—  
Deposits as at 31.12.1970: over  
L. 1.300.000.000.000.—

The BANCA NAZIONALE DELL'AGRICOLTURA expresses its most sincere thanks to the Correspondents and friends abroad who have so kindly sent their wishes on the occasion of its Fiftieth Anniversary.

The Bank was established in Milan in 1921 with the object of encouraging the development of the Italian agriculture by granting both ordinary and special credit facilities and has progressively grown and extended its activities also to the fields of industry, commerce and services.

The BANCA NAZIONALE DELL'AGRICOLTURA is at present the primary private ordinary credit bank in Italy and handles every type of banking transaction on behalf of many important customers.

141 Branches in Italy—Representative Offices in Frankfurt, London, New York and Paris.

Throughout the UK call

01-246 8026

for the latest

FT INDEX  POST OFFICE

A new Financial Times booklet

## Industrial Relations:

The New Act by John Elliott,  
Labour Editor, Financial Times

Publication Day: Friday October 15

This important booklet reprints a series of articles on the subject which appeared from September 28 to October 6 in the Financial Times. It explains the key points of the Industrial Relations Act, and their implications, under the following headings:

- \* Operating the labour courts
- \* Registration—a key issue
- \* Union rights and membership
- \* A framework for bargaining
- \* Strikes—changes in the law
- \* The rights of the individual
- \* Unfair industrial practices

Please send me .....copy/copies of INDUSTRIAL RELATIONS: The New Act, at 25p each (plus postage at 3p per single copy). A discount of 10% is given on orders for 10 or more copies and 15% discount on orders for 100 or more.

I enclose remittance of £      p.

Name

Position

Company

Address

Please return coupon to: Financial Times, Subscription Department, Bracken House, Cannon Street, London, EC4P 4BY.

## Pub licensees say longer hours would lead to closures

MANY PUBLIC HOUSES could be squeezed out of existence if the Government mishandled the question of licensing hours, it was claimed yesterday. The National Federation of Licensed Victuallers, which represents 35,000 licensees in England and Wales, told a House of Commons committee on liquor licensing that anything more than 9½ permitted hours was not generally feasible. The federation recommended to the Select Committee that licensees should be given powers to open their pubs for a total of 9½ hours between 10 a.m. and midnight, with the right to admit family parties including children to selected bars. "Everyone has heard of country pubs being squeezed out of existence. A mishandling of the question of permitted hours by the Government, whether for the benefit of the tourist trade or anything else, could lose us many more," said the federation. "Already the licensee and his wife together work 154 hours a week on average, so that the pub could be kept open longer only if staff were employed. "But even an untrained barman would demand more than the license himself is receiving and could be paid only, in theory, by increasing prices. In practice, the attempt to do this would cause custom to fall away and would aggravate the licensee's difficulties." On the question of children in bars, the federation believed that the right step would be to grant freedom to cater for the whole family—with drinks only if desired—in selected bars of pubs, at the discretion of the licensee. "To open the way, the law might be amended as to enable the licensing justices to grant a supplementary licence, on application by the licensee, for any suitable bar or bars specified by him to permit access by children in the charge of an adult." Continental-type cafes might bar the pub by draining away an essential part of its trade. The federation explained: "Why should the solid-looking English pub be so vulnerable compared with the Continental cafe? "The point can be answered very briefly. Let the excise duties be brought down to the level at which they stand in, say West Germany, where beer prices are much the same as in this country, and the pub could stay open all night—with a well-paid barman on duty to enable the licensee to get a reasonable night's rest." It also stated that "the grant of a supplementary licence would have the effect of knocking the bottom out of the licensing system, so leading to the increase in drunkenness and disorder occurring in periods of infirm control in the past."

## Co-ordinating committee on conservation planned

A PRELIMINARY meeting of various professional bodies concerned with the planning, management and development of the natural resources of land, air, water and wildlife has taken steps to establish an inter-professional co-ordinating committee on conservation.

The initiative was taken by The Royal Institution of Chartered Surveyors following the suggestion made to the Standing Committee of "The Countryside in 1970" by its Professional and Technical Services Liaison Committee.

The new body aims to provide a pool of professional information, techniques and skills and to disseminate information including sources of professional advice relevant to conservation. The Committee will hold its first formal meeting early in 1972.

Mr. Henry Gilbert is chairman, and the Committee has already agreed to establish a steering group to prepare a draft constitution and to outline the Committee's course of work. Among professional organisations represented at the first meeting were the County Land Agents' and Valuers' Association, Institute of Agricultural Engi-

## HOME CONTRACTS

### CJB wins £1m. plant order

CJB (Projects) has been awarded a £1m. contract by the Borough of Swindon for a refuse incineration plant in the Redbourne district. Work will start in the next few months and should be completed in May, 1973.

Whesee has secured a £200,000 order from Foster Wheeler for an atmospheric pipediff to be erected at the Esso refinery, Milford Haven. Work on the order has already begun.

President Office Equipment, a subsidiary of A. Aronson (Holdings), has won a contract worth £250,000 from the Department of the Environment. This is for wooden office furniture and equipment for hospitals and educational establishments.

MRS International Inc., Watford, a subsidiary of Acco International, has received three orders for materials handling equipment worth over £165,000 from British Leyland.

AES (Building), a member of the Avonmouth Engineering Group, has received a £100,000 contract for the first phase of extensions to the industrial premises of the Coumho Steel Company in Canning Town, E. The work comprises piling, structures and gantry craneage.

### STATION CLOSURE PLAN AGREED

The closure of Ashchurch for Tewkesbury railway station, Glos., has been agreed by Mr. Peter Walker, Environment Secretary.

Little use was made of it and little hardship would result from its closure, said a report from the South Western Area Transport Users Consultative Committee, which Mr. Walker had announced.

The closing date would be announced later. British Rail Western Region said yesterday.

## GARDENS TO-DAY

# Let the grass do the work

BY ROBIN LANE FOX

PLANNING and making flower beds for next year, I am faced by the problem of edgings. The front of a bed is not its most important part, as bold plantings in the middle or back will always lead the eye to them, however dull the foreground.

But this secondary role makes the problem even more difficult: in front of tulips and roses, the edging must be firm without being too gay, but it must also be easy to maintain. The most frequently planted edgings in this country fulfil neither need: French Marigolds and White Alysium, both of them annuals, mean a lot of work, even if you like their colours in lines or masses. They both smell vile, Alysium reeking of cheap powder and Marigolds of stale tea leaves, and they both clash with any flowering neighbours. Give me a dandelion any day.

### Lines soften

Grand landscape gardeners and books by gardening connoisseurs often recommend a line of paving stones along the front of the border, repelled by Marigolds, they have fled to building materials instead. The idea is more attractive than many of the results.

Ideally, the front of the flower bed can be planted with loose growing shrubs and herbs which then fall informally on to the paving and soften the ugly straight line of the border; in practice, paving stones look silly in many sites where borders have been planted (the edges of a large lawn for example) and they do not fit well with beds which curve or zig-zag.

In broad open spaces they need laying more than one stone wide

if they are not to look fussy, but this extra width costs extra money and paving stones are too expensive to be used extravagantly. In a small intimate garden, the idea can be made to work, though it does nothing to ease the problem of mowing. The stones should be laid a little lower than the level of the lawn which they adjoin, so that the mower can be run over the grass edge. But though that stops the grass-edge growing upwards, it does not stop it growing sideways and unless you go along the paving stones with edging shears three or more times a year, the paving stones begin to get smothered. If you make an edge between the paving stones and the lawn, you have only put the problem a further yard or so away, giving yourself a paving edging instead of a lawn edging.

Unconvinced, therefore, by this grand idea, I still prefer plants. If the flowerbed adjoins the lawn, why not plant ornamental grasses as an arboreal between them? First, the green turf, a living plant as much as any rosebush, then the garden grasses, gladioli, perhaps, like the small Milium Effusum Aureum or Bowler's gold grass, as admirable as the gardener whose name it bears, and then, behind, the flowerbed filled with whatever you please: by choosing a vigorous garden grass as your edging, you can extend the lawn as far as you want and when necessary, run the mower over the edging as well as the turf to keep it tidy.

The prettiest one to try is Phalaris Arundinacea. Picta which has white striped leaves and is easily increased by division, an important asset where a long stretch of edging is needed. By mid-June this grass which you least enjoy.

### Not perfect

Of course, these grasses are not perfect. Those which are truly weedproof, like the dark green Festuca Eakia (or Crinum-Unsi), which makes carpets six inches high, are as rampant as the lawn itself; those which are most ornamental, like the striped ones I mentioned will not keep out couch grass or annual weed.

They, too, can spread very wide but at least they are pretty when they do so: there is a decided logic in edging one grass with another in order to pass imperceptibly from lawn to flower bed and I am prepared to put up with occasional weeds and disorder in order to enjoy it.

The grasses are not expensive to buy and they are very simple to increase, provided you give them a year in which to spread into mats. All you then have to do is to chop these mats up into small rooted pieces and line them out, where you want them. It is cheaper than buying paving and much less laborious than annually bedding out marigolds: gardening wisely, you sit back and let the grass do the work which you least enjoy.

# This building is more than new. It's news.

That is, as well as being newly-completed by Wimpey, it is radically different.

The complete block is insulated against every kind of weather and incorporates a heat recovery air conditioning system.

Heat-gains from lights, occupants and machinery are recovered through the light fittings, the air being filtered, cooled or heated, and returned to the offices.

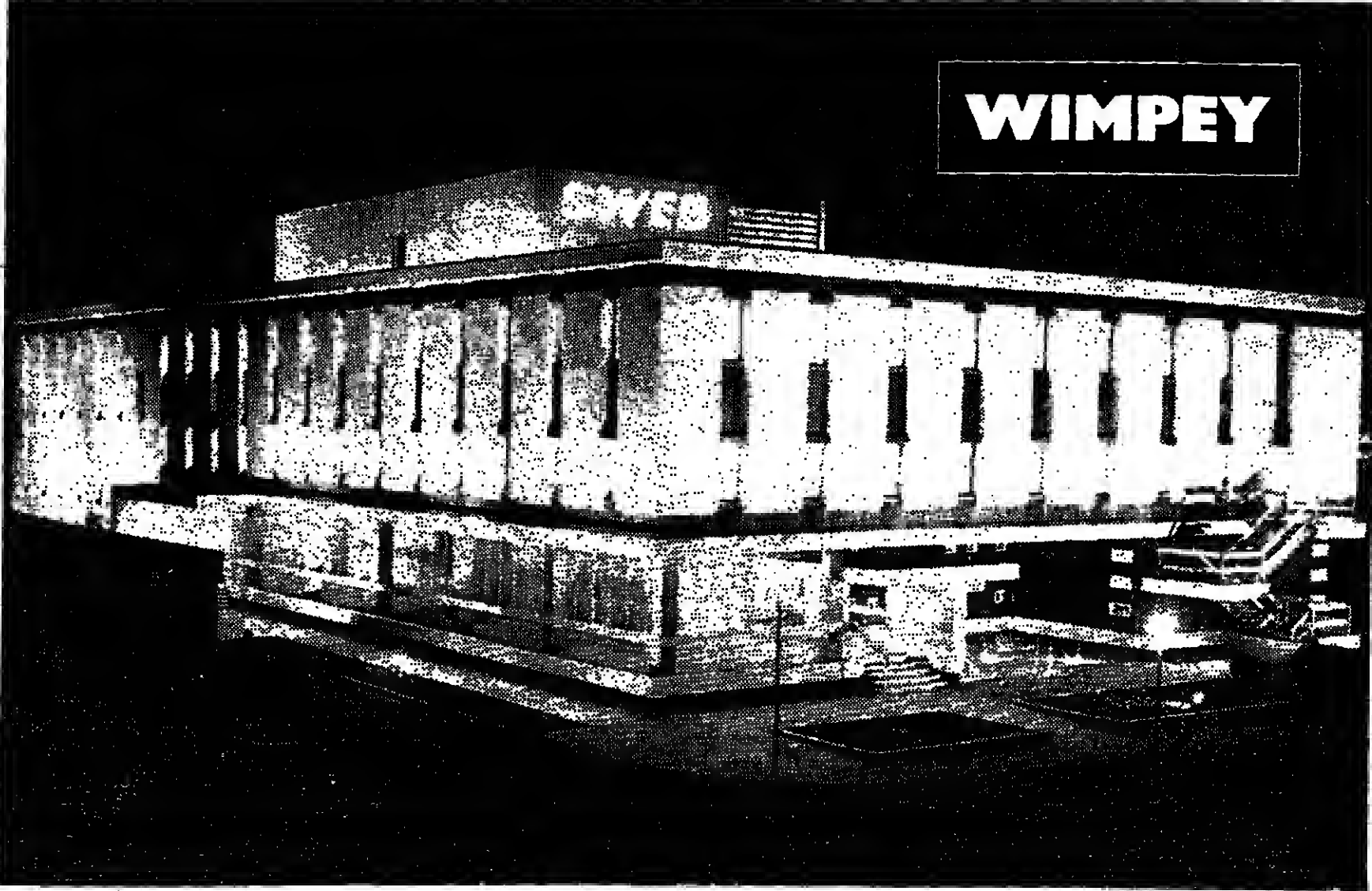
And this revolutionary installation, carried out by Thorn-Benham, means three things... capital costs and running costs, both are less: and greater employee comfort is provided.

This South Western Electricity Board's office building was constructed by the Wimpey Bristol organisation who also co-ordinated the specialist sub-contractors and suppliers.

It is not a lone example. Co-operation between the local Wimpey organisation and the Yorkshire Electricity Board resulted in the recent completion of a similar example of integrated environmental design. Elsewhere Wimpey have been engaged on two further projects under the direction of the North Eastern Electricity Board.

Great national organisations working for the common good—at local level.

Avonbank, the new district headquarters of the South Western Electricity Board.





### Vehicle and General Tribunal of Inquiry

A dynamic American company engaged in the manufacture and distribution of industrial chemical products is rapidly expanding its European operations. The consolidation of its European Financial Controller will strengthen its Birmingham based top management team overseeing the operations of a number of European companies. He will be expected to develop and implement accounting and financial policies and procedures for more effective management control and will be involved in a wide range of European business problems including liquidity, special investigations and staff management.

- THE salary indicator is £8,000.

10 HALLAM STREET • LONDON WIN 6DJ

## Hd



# The Executive's World

EDITED BY  
DAVID PALMER

# Your Business Problems

## How the French see U.K. entry to EEC

By Pamela Readhead

FRENCH managers think British entry into the Common Market will be a good thing—for Britain. In a survey of 650 industrialists by the Chambre de Commerce et d'Industrie de Paris, 77 per cent said that entry would be good for the U.K.

Although 69 per cent thought that U.K. entry would also be good for France, they jibed at the idea that it would be good for their own companies.

Suspicion of British motives for joining the EEC runs so high that just over half the survey thought Britain wanted to join for purely selfish reasons.

Young men in the survey were less prejudiced than the older ones.

Here again there was a general feeling that British entry was fine, in general, but that it would have a detrimental effect on the respondents' own company. In broad terms, the commercial sector was more inclined to welcome British entry than the industrial sector.

Both sectors agree, however, that French industry has more to fear from German competition than from the British. On the other hand, two-thirds of the survey thought that their British counterparts did not fear them either.

Individual managers thought that French food and drinks had a good chance of taking the British market by storm. British clothes and machine tools, on the other hand, were expected to hit the French market hard.

When it comes to action, the industrial sector appears to take a more positive line than the commercial sector. Forty-nine per cent see themselves selling in Britain, compared to 25 per cent in commerce. A third of the survey saw themselves forming links with British firms, and 20 per cent of respondents from large companies (over 200 employees) saw themselves setting up business in the U.K.

## Do Outward Bound—be a better manager

BY ANTHONY THORNCROFT, MARKETING EDITOR

JUST BEFORE dawn the other Sunday morning, 30 odd managers and supervisors employed by H. P. Bulmers, the leading cider manufacturer, staggered out of their "polytunnage" on to some Lake District peaks. Ahead of them lay the task of rescuing four girls who had become "trapped" at the top of various crags; behind them lay 24 hours of tramping over mountains, preceded by a week's toughening up at Brathay Hall, where bodies and minds had been professionally stretched. By lunch time this final exercise was over and they could return to reality. But Bulmers and the participants went back to the Hereford factory convinced that this managerial Outward Bound course was not as ridiculous as it might sound.

### Parachute

It is obviously a funny kind of management training but then Bulmers is a funny sort of company. Its vice-chairman Peter Prior is a keen free fall parachutist, and skin diver, and motor bike rider. And he reckons that the thousand odd other employees could also benefit from placing themselves in situations where the ability to think clearly and make decisions becomes a matter of life or near-death. So at Bulmers the workers belong to parachute or motor clubs rather than to operative societies and there is no shortage of volunteers for the week at Brathay Hall on the northern shores of Lake Windermere.

to take advantage of Brathay for its executives. In the past it has been used to bring out promising but timid apprentices. Bulmers has devised its own programme, which is decidedly Spartan. Getting up at seven for a mile run or exercises on the ropes is a pretty soft curtain raiser to days which are packed with daunting hardships. What are planned as quiet cruises on the Lake end up with the instructor suddenly yelling to the group that they are in the South Pacific, a typhoon is threatening, and they must somehow transplant themselves from the island where they will be marooned to the mainland in 90 minutes. And just in case there are any strong swimmers, the water is infested with sharks.

To make things more difficult every member of the four competitive groups into which the hand is divided takes it in turns to be leader. So someone who a week earlier had been supervising the girls on a small section of the hotelling line might now be giving orders to the production director. It is a terrifying prospect.

Not all the tests are out of doors. After every exercise there is a comprehensive debriefing session when the members of each group complete forms and award marks to the leader for that particular operation. So not only might a manager face the problem of transporting his team across a fever-infested river pursued by savages with just pieces of scaffolding as aids but he must also relive the experience later and try to explain why he did not mastermind some feasible escape. However, the instructors are careful enough to find good points in everyone's leadership method and the groups quickly become such close institutions that they are not prepared to fritter away their chances in the competitive team championship with petty recriminations.



The course has three basic aims. To develop individual leadership styles and techniques; to enable Bulmers managers to get to know each other; and to improve communications inside the company. The whole operation is based on the Industrial Society's Action Group Leadership and the Society sends along

experts to teach the theory in the first two days.

Does it work? It certainly improves communications inside Bulmers. It was difficult to believe that this was actually a collection of people only connected through their workplace: by the end of the week they were a close band of brothers. The crucial question is whether the ability to rescue a "body" from the bottom of a tarn improves a managers performance in the restrictions of company life.

There is also the fact that a division could arise in Bulmers between the people that have been to Brathay and those that have not—so far no shop floor workers have been along. More to the point, any individual manager's ability at making and communicating decisions is less important than long term global changes which can upset the best of management teams.

But Peter Prior is certain it works. He can already refer to a senior executive who attended the first course in the summer and who changed from being virtually impossible to deal with to a sociable and co-operative member of the management. As to improving business decision

## Removing a receiver

BY OUR LEGAL STAFF

As the dehture holder of a small company I appointed a receiver, but am dissatisfied with him. The dehture deed gives me power to appoint or discharge a receiver at any time. If I decide to replace him, are there any particular formalities I should observe?

Any removal by you of the receiver from office will only operate from the date when notice of his removal is communicated to him. You should therefore send him the document removing him from office (in accordance with whatever are the provisions in the dehture). This will be all that is required formally to remove him. You will also have to appoint somebody in his place.

purposes, that proportion of the house will be taxable on sale as a business asset.

You may be able to roll-over the gain against the next purchase if it is also used in some part exclusively for the same purpose and is acquired within 12 months following the sale of the first property.

The practical effect is that if the proceeds of sale relating to the business proportion equates with the proportion of cost of the new house related exclusively for business purposes, there will be no tax payable now, and the gain will be rolled over until the new house is sold.

If the approved scheme defines final remuneration as the highest five years' salary, then the pension from the first company will not be reduced so long as an appropriate period of service has been achieved. The employee can indeed participate in the pension scheme of the second company. It is, however, unlikely that any contributions paid in the second company's pension scheme would secure any additional benefits over those already earned with the first company.

If the employee left the first company and had his entitlement frozen because of his position, it would be unlikely that contributions to the second company's pension fund would, in fact, earn any additional benefits. This is because unless the salary from the second company is such that 40-60ths of it exceeds the 60 per cent of the highest five years average of the employment with the first company there would be no benefit in joining the pension scheme of the second company.

## Distress for ground rent

Could you advise me what to do to obtain payment from a person who fails repeatedly to pay his ground rent when due?

You should put in force a distress by means of a certificated bailiff. This is an unpleasant remedy, involving seizure of sufficient goods to meet the amount of the rent in arrears and the tenant has to pay the bailiff's costs. We think that after one (or perhaps two) distraints upon his property the tenant will think better of the matter and thereafter pay promptly.

## Responsibility for chief rent

A piece of land I owned, in respect of which I both paid and received chief rents, with a net balance of payment, has been compulsorily purchased, and the conveyance, as agreed by my solicitor, provided for a payment by the corporation to me of a chief rent, leaving me still a net debtor. As I shall no longer have any interest in the land, should not the corporation have taken over the responsibility for the payment of the chief rent completely. Since you will be paying completely with all the land on which it is charged, we see no reason at all why you should be expected to pay the rent which is, as you observe, charged on the land and not on you. We think you should ask your solicitor to think again.

## Loss of a certificate

I lost a unit trust certificate and understand that I have to apply for an indemnity. (a) How long would an indemnity last if I received a duplicate certificate and sold all my units? (b) Can I insure to cover the amount of the indemnity? I suggested that a stop be put on a sale under the lost certificate and that a new one be issued to me, but with no response.

(a) The indemnity would continue, but after a sale and registration of the purchaser as the new holder of the units there would be no possibility of any liability thereunder arising.

(b) This would be possible, but we would recommend a quick sale (and if you wish a repurchase of other units). The only estoppel hindering the Unit Trust is that, at the date when the certificate was issued, you were the registered holder of the units. Consequently, once a sale has taken place the estoppel (which was true) now becomes quite pointless, as there is no estoppel to the effect that no change of ownership will be registered without production of the certificate. Accordingly, the unit trust itself is in the clear, and hence the indemnity falls to the ground.

## Extracting a bank balance

My ex-partner refuses to sign a cheque to enable me to draw out the balance of our joint account from the bank, and the bank refuses to pay without two signatures. Is there any way I can get the money?

Yes—sue your ex-partner for the winding-up of the partnership affairs and an account. This is of course in the nature of a sledge hammer to crack a nut, but it will have the desired result—finally.

## Drawing two pensions

An employee who is a participant in an approved company pension scheme, where the pension is 60 per cent of the highest five years' salary, has taken a substantial salary cut to work on a part-time basis. Consequently, his pension at age 65 will exceed his current salary from the company. He is also in part-time employment with a second company, is his pension with the first company likely to be reduced because of the requirements of the Inland Revenue? Can he participate in the pension scheme of the second company?

Could this employee also participate in the pension scheme of the second company if he were to leave the first company and take a frozen deferred pension?

No legal responsibility can be accepted by the Financial Times for the answers given in these columns. All inquiries will be answered by post or soon as possible. No charge is made for this service except in relation to investment matters.

## Rolling over a gain

I am a professional author and about a quarter of my house's running expenses are allowed as business expenses against tax. If I sell the house and buy another, will capital gains tax be payable? What happens about the house I buy?

If you have used part of your house exclusively for business

## Best Seller in the North East



Hartlepool is No. 1 Action Area offering tremendous benefits to industry and commerce seeking growth and expansion.

Building grants of 45%. A five-year rental period with advance factories. Up to 30% aid with the wage cost for the first three years, and also a helping hand with transport and moving expenses.

Take Action now! Get your free copy of "OPERATION-EXPANSION"

Simply write or phone A. G. Barker, Municipal Buildings, Hartlepool, Co. Durham. Tel: 0429 2161 (Ext 34).

## Hartlepool special development ACTION AREA

## If you want to go to Southampton go to Waterloo

Pop into Waterloo any day and you'll find 27 Inter-City trains go to Southampton, in times as fast as 70 minutes.

Trains that take you straight to the city centre. Beat that if you can.

27 trains a day—fastest journey 70 minutes.

Inter-City makes the going easy (and the coming back)

## CORPORATE DESIGN The do's and the don't's

BY JOSE MAYSER

HOW'S your corporate image? If you have got one the chances are you are a big company, not only able to pay for one but also feeling its need. The bigger the company, the bigger the pressures to present it as a still human and lively entity to its customers, its employees and—by no means least—the City.

The Council of Industrial Design arranged a series of conferences on the subject during 1970 and 1971. Papers from these conferences have now been published in book form by the council. Well designed and edited, the book, *A Management Guide to Corporate Identity*, makes fascinating reading, especially those sections dealing with corporate image case histories which are offered with disarming frankness by nine important companies.

No one, editor John E. Blake of the council, or contributors

who include designers and their clients, really questions the importance of the corporate identity concept. This is accepted and constantly reiterated with force and some clarity.

Smiths Food Group and Unigate describe step-by-step workings with their designers. Cape Universal Building Products and International Distillers and Vintners describe the adoption of corporate images that were necessitated in each case by the merging of two companies—the relaxed, non-didactic style of Jasper Grinling, managing director of IDV, is a relief after the somewhat tense diatribes of one or two other contributors. Even ICI and Philips appear to tell all.

Anyone accepting the initial premise that "industry now looks upon corporate identity design as an essential weapon in its armoury" will find this book full of valuable information.

Not quite so convincing, though, are the illustrations to the case histories: the actual symbols, logos, letterheads and van liveries which the companies, used as examples, have chosen. They are neat, colour, full and bold. But several show a disconcertingly cool and inhuman quality.

For instance, ICI's brief to their designer included the instruction that "the image of ICI to be projected by the new programme should be that ICI is modern, dynamic and human." Some job. And I don't think Design Research Unit have entirely succeeded in projecting the latter quality despite lengthy and conscientious research. The famous rounded (only slightly modified) since to abandon it as a trade mark would have been too expensive) carries exactly the bland, keep-out quality which should have been avoided. The black Helvetica lettering used



against an orange ground on external signs and vans, and on grid layouts for stationery, is admirably clear and explicit. But it too evokes machines rather than men, efficiency rather than humanity.

Similarly restrained (the same neat type-face is used), and hold equally short on vivacity is the programme for Cape Universal Building Products by Crosby & Fletcher Forbes. Letterheads, advertisements and posters may speak solidly to the City, and security to the employees. To the

consumer there is a vague impression of faceless men in remote places.

On the other hand, the BOC too evokes machines, with its strong, urgent stripes, its round BOC lettering, and its red colour scheme is full of visibility. So the blue and yellow of the ground which Henric Design Associates established as a symbol for the Blue Circle Group. It is supported with a special type-face, based on sans serif which is light yet strong, immediately legible but not at all forbidding.

## Wage freeze hits U.S. executives

BY A U.S. CORRESPONDENT

THE WAGE freeze in America is affecting the executive manager in an unexpected way—since he can't get a rise in his own company, he is more likely to move to another.

Aside from this, President Nixon's New Economic Policy has been helpful to managers in other ways. Bonuses aren't frozen, so they can rise. Stock prices are going up, so stock options are worth more. Income tax changes let earners keep more of their hard-earned gains.

The only negative factor in the situation is the freeze on fixed salaries and one management consultant says that the immediate possibility of further controls has had a very profound impact on executive compensation.

On executive mobility, Spencer Stuart, head of his own recruiting group, told the Wall Street Journal: "Companies may be losing some key people if they can't give them raises and don't have promotions for them. It could well be that executive

recruiters will find it easier to pick off some good guys who otherwise wouldn't be pickable." Heidrick and Struggles, another recruiter, says August was the best month in the firm's history. "Among executives who are hesitant about leaving," says Heidrick and Struggles' Gerald R. Roche, "the knowledge that they can't get a raise where they are because of the freeze can be the deciding factor."

But even if he stays put, the executive in the \$200,000 a year class will do better than last year. Not counting any bonuses from improved profits, changes in the income-tax laws will let him take home nearly \$140,000, some 5 per cent more than in 1970. And next year, because of rate decreases written into the present law, he will have about 10 per cent more.

Stock options are also proving worthwhile. They have languished for the past two years as stock prices languished. Now, with the market rising and business promising more profits, an option scheme becomes more attractive.

## Nibble the nuts and leave.



Most restaurant owners agree with us when we tell them about KlosterPrinz, that veritable Prince of Piesporters a deliciously crisp, slightly dry Moselle, the most handsome compliment that can be paid to good food.

But there are still a few who remain impervious to our coaxing. We've tried convincing them. We really have. Arguments, cajolery, persuasive blandishments. Well, the time for talking is over. Action is called for.

So this is where we need your help. We'd like you to seek out these stubborn establishments, demand to see the wine list before you even look at the menu, summon up your most clear, ringing tones and say "The justifiably renowned KlosterPrinz would seem to be conspicuous by its absence. Hmm". Then, while the wine waiter looks on in wild surprise, just nibble the nuts and leave.

Now this may not make you particularly popular. But when the restaurant in question gives up the unequal struggle and adds KlosterPrinz to its wine list, you may look back with satisfaction on a job Well Done.

And, like Thomas Osbert Mordaunt (1730-1809) once said: "One crowded hour of glorious life is worth an age without a name".

## KlosterPrinz PRINCE OF PIESPORTERS

Coleman & Company, Norwich and London. Shippers of fine wines since 1887.



Head Office Editorial & Advertisement Offices:  
BRACKEN HOUSE, CANNON STREET, LONDON, EC4A 3DF.  
Telephone Day & Night: 01-248 8000. Telegrams: Finantime, London.  
Telex: 886341/2, 8863897

FOR SHARE INDEX AND BUSINESS NEWS SUMMARY RING: 01-248 8026  
Birmingham: George House, George Road, Birmingham B3 7QY.  
London: Director Bank Chambers, 25 Abchurch Lane, London EC4A 3DF.  
Manchester: Quorum House, 100 Market Street, Manchester M1 1PL.  
Paris: 25 Rue de Valenciennes, 75011 Paris.  
Rome: 112/113, Via del Corso, 00187 Rome.  
Tokyo: 15F, 1-1-1, Marunouchi, Chiyoda-ku, Tokyo 100.  
Frankfurt: 11, Hauptstrasse, 6000 Frankfurt.  
Buenos Aires: 1812, Roca de Comercio, 10000 Buenos Aires.  
Sydney: 211, 1171 and 20974.

WEDNESDAY OCTOBER 13 1971

## Mr. Nixon and détente

AFTER President Nixon's announcement in the middle of the summer that he had taken up an invitation to visit Peking, little that now happens in international diplomacy can be counted as surprising. Yesterday's news that he is now to visit Moscow in an endeavour to achieve "better relations" is indeed only a logical extension of the world-wide diplomatic offensives now being conducted by both sides, each with varying degrees of success and for various reasons. But what both the Americans and the Russians are implicitly acknowledging is that China has now emerged as a world power, even a superpower, which has to be reckoned with whether it gets into the United Nations or not.

### Moscow's view

So far as the West is concerned, the Soviet offensive, including the coming summit with President Nixon, is being conducted in the interests of détente in Europe, and more specifically with the object of finally convening a European Security Conference. In this field the Russians speak without fear of contradiction for the whole of the Warsaw Pact. If they are able to hold conversations with the White House, then this détente will be advanced with the most powerful and influential member of the Pact talking to the most influential and powerful member of the NATO Alliance. Assuming a minimal amount of give and take on both sides, the Security Conference—by dialogue on a multi-lateral balanced force reductions—will have been brought a step nearer.

Moscow's view is that détente is desirable and the Conference should be held in the interests, primarily, of peace in our time. But now that a firm Soviet foothold has been established in Czechoslovakia, and now that bilateral talks between the two Germanies are apparently at last moving in the direction of recognition of East Germany as the German Democratic Republic, Moscow also has a stronger interest than ever in underlining the status quo in Europe. Some indication from the Russians that they can, when it suits them, be pliable negotia-

### U.K.'s position

Britain, meanwhile, like everyone else who is making themselves heard on the subject, has spoken up in favour of détente. The Russians, hurt by the expulsions row, are suspicious of Britain's motives and are of the opinion that Mr. Heath would not like to see a European Security Conference until after he is in the Common Market. But whatever the logic of this opinion, it fails to take account of the fact that, after America, Britain has one of the most influential voices in NATO today. Britain's view, as it has told NATO and as Sir Alec Douglas-Home has made clear to Mr. Gromyko, is that détente has been brought nearer and not put back by the British expulsions.

However, it is clear that whatever Britain may feel about détente will not now influence the thinking of the Russians. The Nixon announcement, coming so soon after the cancellation by Moscow of a visit by the British Foreign Secretary, can only underline for the Russians that the most significant East-West deals can only be achieved with the Americans. This, if it were needed, is still further evidence that Britain and the other West Europeans should be joining forces with the greatest possible speed.

## Testing time for coal

MR. DEREK EZRA has succeeded Lord Robens as chairman of the National Coal Board at a time when the industry faces a brighter future than for years past. The 'sixties were a decade of rapid contraction during which output dropped by a quarter and the number of active pits was reduced by over a half. The 'seventies, however, have begun in a quite different atmosphere. Production has levelled out and there is much talk of stepping it up to supply the EEC with some of the coal it now imports from elsewhere.

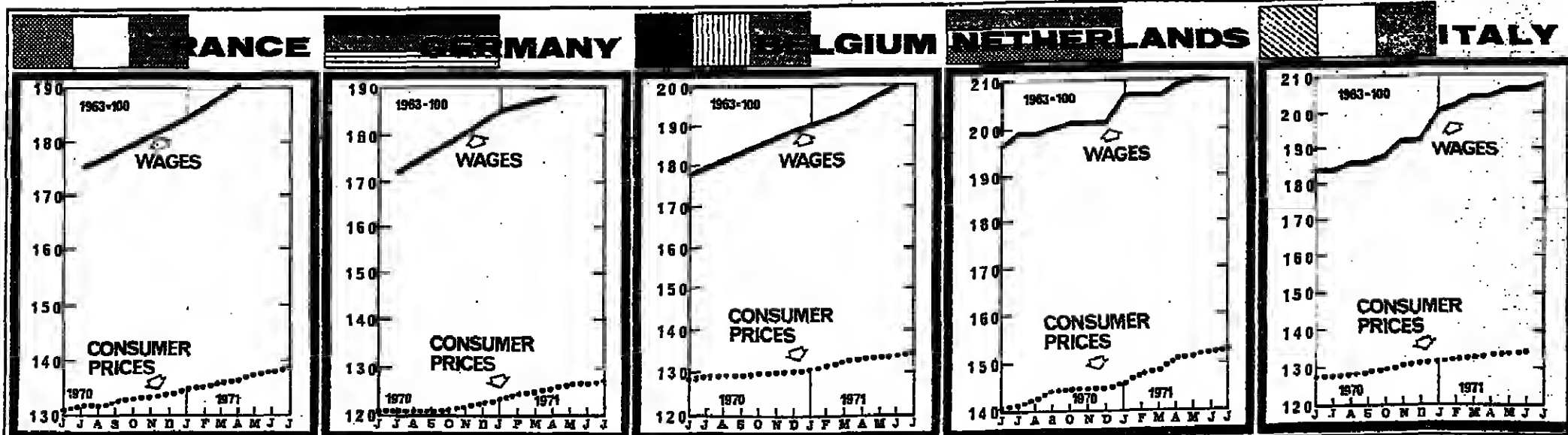
No pits except those worked with longwall have been closed for nearly two years, and it was only the mildness of the weather which prevented a serious shortage of coal last winter. Technical trouble with nuclear power stations and a sharp rise in the price of fuel oil have improved the competitive position of coal and the medium-term outlook for the industry. At the same time, they have enabled the NCB to raise its own prices (after some delay imposed by Government) and put its finances in better order. During 1970-71 it made an operating profit of £34.1m. and a small surplus after interest payments of £0.5m.

### Hiring off

There is also at least a possibility that it will succeed in setting its relations with Government on a more permanently satisfactory basis. Some Conservatives believe strongly that the NCB should have off to the private sector its ancillary activities—its investment in North Sea gas, for example, and its chemical business. Mr. Ezra is as firmly opposed to this course as was Lord Robens, partly because he regards these activities as a natural development of the Board's main business, partly because they (together with open-cast working) supply most of the profit and are expected to supply more.

He has put forward alternative proposals which may well prove acceptable to a Government which, in the case of steel, has already shown itself to be more flexible than at one time

seemed likely. The Board's capital expenditure is now running at a level which can at a time when the industry faces a brighter future than for years past. The 'sixties were a decade of rapid contraction during which output dropped by a quarter and the number of active pits was reduced by over a half. The 'seventies, however, have begun in a quite different atmosphere. Production has levelled out and there is much talk of stepping it up to supply the EEC with some of the coal it now imports from elsewhere.



# Troubles in common for the countries of the Six

BY IAN DAVIDSON

THE economic case for British membership of the European Community is usually based on the idea that participation in a larger market will offer the opportunity for faster and steadier growth. In itself the argument is no doubt sound. Yet it is ironic that, just as Parliament reassembles for its historic debate and vote on the question of principle, the newspapers should be full of the economic difficulties of the Common Market countries.

In all of them wage and price inflation has become a serious problem, if in varying degrees. Hardly a week passes without fresh reports of cutbacks in company profits and investment plans. In Germany industrialists are openly worried by the upward float of the Deutschmark and its impact on their export prospects, and there is a clear possibility that the downturn in the boom could lead to a recession.

### Worse still in Italy

In Italy the situation is even more dramatic, and has been described by Signor Renato Lombardi, the president of the Italian Employers' Federation, as "the most serious crisis which Italy has suffered since the war." The massive wage increases which came into effect after the "hot autumn" of 1969 have not prevented the unions from continued militancy, and the economy is well on its way into a recession.

Industrial production, hard hit by strikes and stoppages, is 3.5 per cent down over the first eight months of this year, in marked contrast with the 1969 when it regularly expanded by 7-10 per cent a year. For the first time since the war unemployment has risen to more than 1m., and a further 100,000 workers are now on short time. At the beginning of the year the 1971 growth rate was expected to be of the order of 6 per cent; the latest forecast from the EEC scaled this figure down to 4 per

cent; but it is now being conceded that the out-turn may well be zero.

On the face of it the Dutch economic situation is much less extreme, but in some ways the dilemma of the authorities is just as acute. The economy is still expanding fast, even if at a slower rate than last year, and 1971 as a whole is likely to see growth of around 5 per cent. But inflation is now very largely out of control, with inevitable consequences for profits, investment and the external account.

Consumer prices for non-food goods in July were 9.8 per cent higher than a year earlier; wages rose 12½ per cent last year and are expected to go up as much again in 1971, while the current account is likely to plunge into a record deficit of £12,000m. (about £240m.). Unemployment is still relatively low, but it has been rising fairly steadily since the beginning of this year, as a result of lay-offs and non-replacement of workers.

To some extent the seriousness of the situation has been masked by the inflow of speculative money during the summer, but the Algemeene Bank has warned that if what it calls "the present moderate recession" continues, the Dutch economy could enter a more dangerous phase early next year.

### Price controls in Belgium

In contrast with the Netherlands, consumer prices in Belgium have gone up much more slowly, and in July were only 4.2 per cent higher than a year earlier. The main reason for this, however, is that whereas the Dutch have given up their attempt to enforce a wage and price freeze (because it did not work), the Belgians did impose price controls to neutralise the effects of the introduction of the value-added tax at the beginning of this year, and tightened these controls in April. They did not control

wages, however, and since industrial earnings rose 12.4 per cent in the year ended in June, it seems likely that there will be trouble in store.

Moreover, in August the Belgian Government finally agreed to float the franc in tandem with the Dutch guilder; over a period this should bring the guilder down and improve its competitive position, but worsen that of the Belgian franc.

If the prospects for the French economy represent one of the bright spots on the European scene, it is at least partly because of the government's refusal to float the franc upwards against the dollar, and its determination to pin its hopes instead on a two-tier market. The balance of payments is currently hovering at or near equilibrium, and the government maintains that the present parity of the franc is "exactly right."

This year the French economy is expected to grow by about 5½ per cent, and the government's target of a further 5.2 per cent next year will, if it is achieved, be the highest in Europe. Consumer prices rose 4 per cent during the first eight months of the year, and though the government has recently managed to persuade the leading trade associations to hold down any further price increases to 1½ per cent over the next six months, it is far from clear that these anti-price-increase contracts will be effective.

Wages in any case are rising almost twice as fast as prices, and the government has found itself increasingly sucked into a system of index-linkage between prices and wages. These "contrats de progrès" guarantee a 2 per cent rise in real incomes, and when first introduced last year were conceived as a means of slowing down inflation and of buying industrial peace.

So far, however, neither aim has been fulfilled. Strikes have been frequent this year, with the union militancy extending even into the ranks of the police. Tightened these controls in April. They did not control

tiated by the Government this year with the nationalised industries have either given larger real increases (2½ per cent for gas and electricity) or have included a much quicker feedback from prices to wage payments.

It is symptomatic of the continued rapid growth of the economy that the number of unfilled vacancies has been rising steadily since the beginning of this year, and at over 134,000 is higher than for a long time past; but it is also symptomatic of the wage pressures that unemployment, while not large by British or Italian standards, has been rising recently and at almost 330,000 is high in terms of recent French history.

The major uncertainty hangs over the outlook for the German economy, in particular whether the downturn which is just starting can be controlled so as to avoid a recession. New orders to industry are falling off, and though the labour market is still very tight by British standards, it is a lot easier than a year ago, while numerous companies have put workers on short time.

As one would expect, the effect of earlier inflationary pressures is being felt in a continued acceleration of consumer prices, which rose 5.4 per cent in the year ended in July. But there are distinct signs that the upward pressure on the wages front is easier than it was in April. The hourly earnings index was 13 per cent higher than a year earlier, but during the summer the chemical workers agreed to a 7 per cent wage settlement, and the forthcoming metal workers' claim is only for 9.11 per cent. In the second quarter the Bundesbank claims to detect evidence of "negative wage drift"—that is, a slower rate of earnings increase than the rise of basic wage rates.

If the economy should look like tipping over into a recession, the Government has substantial funds available, both in the budget and in a repayable

tax surcharge, with which to prime the pump. On domestic political grounds Herr Schiller will no doubt try to time the next German boom so that it coincides with the next general elections in 1973. But his difficulties are intensified by the uncertainties in the international monetary system. If he should find himself obliged, in any multilateral realignment of currencies, to accept an uncomfortably high revaluation of the Deutschmark against the dollar, he will need to make doubly sure that the German rate of inflation remains below that of other countries. This in turn could induce him to take reflationary action later rather than sooner.

In Italy, by contrast, the Government's difficulties go far beyond those of fine tuning. Two reflationary packages have already been announced in the past four months, including special credits for industry, cuts in social security contributions, and a massive increase in investment spending by the state in industries next year. The problem is that the Government machine is notoriously inefficient in actually spending the money allocated to it, and there can be little certainty that the public programme of housing, schools and roads will be carried out fast enough.

Steps are at last being taken to rectify some of the worst inefficiencies in the Italian economic system but, like the two reflationary packages, they may be too little and too late. Last week the Italian Parliament passed a tax reform Bill, which will not merely introduce a value-added tax but will also sweep away a host of minor indirect taxes, and introduce a simplified (and hopefully more enforceable) income tax. But years of neglect have helped to provoke a mood of labour militancy which has gone far beyond conventional wage claims—

though these have been steep enough in all conscience, and pushed average wage costs up 23 per cent last year, with a peak of 33 per cent in the chemical industry.

In April the unions moved into the political arena by launching a widespread strike against a Government hushing Fiat into a fundamental reappraisal of working conditions and methods, down to the very principle of assembly-line working. With the spread of unemployment and short-time working, union leaders have recently been taking a more moderate line, but there can be little reason to suppose that Italian industry can hope for an untroubled return to the economic miracle of the 1960s.

### Reactions to dollar crisis

Indeed, in a more general sense it seems clear that 1971 probably marks a watershed in the economic evolution of the European Community. For more than a decade the comparatively painless prosperity which accompanied the liberalisation of trade between the Six enabled each of them to go their own sweet way, with little thought for the problems that would arise as they moved into the early phases of an economic and monetary union.

Their immediate reaction to the dollar crisis, especially in Paris and Bonn, has been to draw back from this embryonic monetary and economic union; in the medium term the six governments will need to recognise the implications of membership in a European Economic Community, and take steps to make sure that trade integration leads to economic co-ordination. This process may well be most difficult for Italy, because of the ineffectiveness of its political and administrative systems; but it will not be easy for any of the Common Market countries—or, if it comes to that, for us.

### Years of neglect

Steps are at last being taken to rectify some of the worst inefficiencies in the Italian economic system but, like the two reflationary packages, they may be too little and too late. Last week the Italian Parliament passed a tax reform Bill, which will not merely introduce a value-added tax but will also sweep away a host of minor indirect taxes, and introduce a simplified (and hopefully more enforceable) income tax. But years of neglect have helped to provoke a mood of labour militancy which has gone far beyond conventional wage claims—

## MEN AND MATTERS

### Clearing cheques faster?

During the postal strike, the banks organised their own delivery system for clearing cheques, and it was even suggested that they might set up a permanent system of their own, instead of spending £1m. a year on postal charges. So far, nothing has come of this. But Mr. Kevin Murphy has been talking to several U.K. banks, trying to persuade them to use his courier service to achieve faster clearance of cheques.

Murphy is president of the American Courier Corporation, a subsidiary of Puritator Inc., specialising in the U.S. in armoured car and courier services. This year, Murphy is expanding into Europe. He has bought two armoured car companies, one in Dublin and one in Frankfurt. In the U.K., Murphy is not intending to compete in the armoured car business—unlike Germany "you already have a mature industry," he says, with Securicor, Security Express, and others. Instead, he offers the courier service, run under the name "Courier 1."

He already has an international courier service to and from the U.K., and is negotiating to buy a British company in the courier business. But he really wants the British banks to agree that the three days at present taken to clear a cheque using the Post Office is too long. His couriers, he argues, could deliver cheques to the clearing computer in time for overnight processing, and take them back to branches in time for opening of business the next day. That way, the banks would have less money tied up in transit, and customers would get their money faster.

In a few weeks, Murphy may know the banks' answer. If they agree, presumably Securicor and the other U.K. firms will be in there too. The question is, in the new competitive climate in banking, is there a business need for quicker clearing of cheques that outweighs the simplicity of using the Post Office?

### The cares of car care

It was all-change day at two of the family-dominated car accessory and component companies. At Holt Products, Mr. Michael Holt, whose father started the "Gun-Gum" car care company, announced a surprise toss and the arrival to-day of a new managing director, Mr. John Parkin, who says he has a "completely free hand" to restore the company's fortunes. At Oldham International, started by great-grandfather in 1865, Mr. Orlando Oldham announced that it was time, in his view, to join with the giant of the battery business, Chloride Electrical Storage. Providing the Monopolies Commission agrees to the marriage, Orlando Oldham will play a wider management role in the new group.

At Holt, Parkin, who resigned only last night as chairman and managing director of Twintings, the tea and coffee company, probably has a pruning job to do. Apart from last year's mild winter leaving lots of Holt's anti-freeze unused, a new factory, a new depot and two new overseas companies in the last year have proved too much to digest. Parkin, a professional manager aged 40, says he has no preconceived ideas about Holts, except that all businesses come down to "control your overheads, increase your margins, maximise your sales." It's

worked for him in TV rental (44 years as managing director of Tnp Rank) and at Twintings, where profits have increased. "It would be the same with sausages."

### Pop to property

Why should anyone want to take over Green Estates (Belfast), whose main assets are a few shops and flats in the centre of that sad city? And why should Mr. Larry Parnes want to do this? After all, the name Larry Parnes, to those of that generation, means the start of rock and roll and pop in Britain. He discovered and managed people like Tommy Steele, Billy Fury, Marty Wilde and Joe Brown.

But since about 1965 Parnes has dropped out of the pop scene. He has had a stake in three Harold Fielding musicals. But principally, Parnes, 42, has become fascinated by property. The attraction of Green Estates lies in a public quote in Belfast which Parnes hopes to transfer to the London Stock Exchange. Going public is, Parnes admits, an old score. Back in 1961, he had a scheme to float a show-biz company, but was told that the City would never accept it. Since then, Parnes has watched Northern Songs, Constellation, MAMs and Robert Stigwood go public (Gordon Mills, the boss of MAMs, used to sing in a Parnes group called the "Viscounts"). This time, Parnes thinks he has the right formula too.

Provided he wins Green Estates—an agreed bid worth £103,000—"it will remain basic to a show-biz company. I'm not a gambler; the only show business interests fed in will be proven successes," like his holding in Showboat. Putting in his own property (his main develop-

ment has been a shop and office complex at Ruislip) could push the asset value up, he claims, to around £1m, and there are some takeovers in the pipeline.

Parnes' main worry is convincing people that he is a shrewd businessman, with more than just an eye for pop talent. But after all his father did have five women's fashion shops on Oxford Street, and his son's first job in the mornings, as an apprentice, was to go round the shop floors with a magnet, as he tells it, collecting, for reuse all the pins which had dropped out of dresses the day before.

### Arm of the law

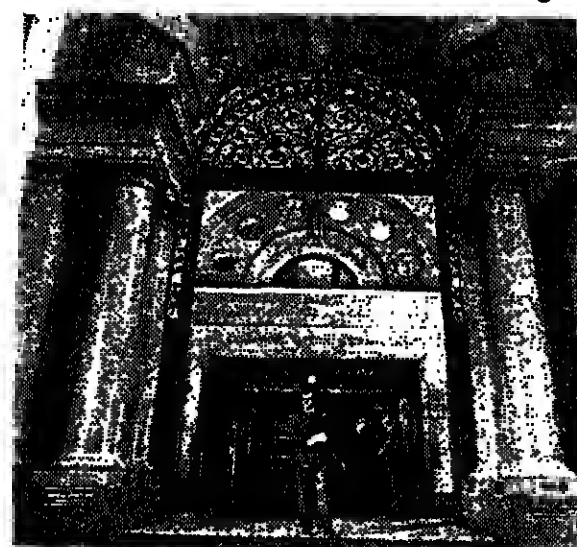
Those who think that academics are no good at the practical side should ponder this story told by Professor N. Kurti, of the Clarendon Laboratory, Oxford, to the Scientific Instruments Research Association.

Some time ago Kurti returned late to Oxford Station to find that the automatic mechanism which raised the station car park barrier upon the insertion of 10p was not working. So he forcibly removed the arm of the barrier, stored it in his car, and drove home.

The following day he returned the arm to the Station and reported his act. He was taken to court, and though exonerated from any criminal act of wilful damage, was still £25 out of pocket by the end.

Not long after, another Oxford professor met the same problem with the car park barrier, and adopted the same solution. But he was not prosecuted. Why? Well, Professor Kurti told an audience that included Dr. Sydney Jones, chief boss of British Railways and chairman of SIRA, the other professor did happen to have a chair in English law.

## Your entry to a Great Country



## Through The Commercial Bank of Australia

We are the open door to your investment problems in this country. We can advise you where to invest. Whether you are opening a subsidiary operation or seeking local associates. We're The Commercial Bank of Australia. With over 840 offices throughout Australia and New Zealand offering full banking facilities. We also have a representative office in Tokyo thereby providing a springboard to rich South East Asian Markets.

We know the markets, we know the investment potential, we know we can help you. By arranging trade introductions. Import/Export advice. Acting as your nominee for portfolio investments. We'll even make your travelling arrangements. So contact us, and discuss your investment prospects.

## The Commercial Bank of Australia Limited

Chief London Office, 12 Old Jewry, EC2R 8DP. Tel: 01-600 8761.  
Head Office and International Department, 335-339 Collins Street, Melbourne, 3000, Australia.  
Principal Office in New Zealand, 328-330 Lambton Quay, Wellington 1, New Zealand.



Observer



# Why package tour prices must go up

Arthur Sandles reports from the British travel agents' conference in Cannes, Tuesday

FOR SOME YEARS the British package tour market has been suffering from a "let the devil take the hindmost" attitude. The success of this drive in numerical terms is, of course, well documented.

More than 3m. people will take package tours next year, about half the total foreign travel movements from the U.K. One in five people who leave Britain on holiday do so with either a Clarkson or Thomson label on their baggage.

However, the cost to the industry in terms of profits has been alarming. As Air Transport Licensing Board chairman Mr. James Lawrie, recently pointed out. On a turnover of £105m. in 1969 a total of 57 tour operating companies made a profit of £1.57m. In 1970 the turnover had risen by around £25m. but that meagre profit had turned into a loss of £1.62m.

## Edging up

It is far that reason that the Association of British Travel Agents, gathering in sunny Cannes this week, has been spending much of its time in trying to work out some way of breaking away from the loss-making spiral. But even before Cannes there have been signs of some changes. Direct comparisons are difficult to make because tour operators tend to change packages slightly, but this year seem to have risen by anything between 5 and 10 per cent. There are some exceptions to this, notably Thomson, but by and large there has been an edging upwards.

That process is hardly likely to stop now. The argument that is raging in the industry concerns just how much more can

be added to tour prices without damaging the business.

The major problem is, of course, that the travel industry is still so fragmented and competitive that even an understanding of the counter-argument to raise prices is difficult to achieve. All the majors are socially friendly, but cut-throat when it comes to business. The man who pours champagne into a rival's glass in a hospitality suite later in Cannes will moments later be pouring vitriol about the same man into the ears of retailers and Pressmen. At the same time at least two of the majors, Clarkson and Thomson, are tending to take the line, "If you can't stand the heat keep out of the kitchen."

To quote Mr. Tom Gullick, managing director of Clarkson's: "This past year there have been a number of crises both within the industry and from outside that inclusive holiday prices (Gullick, like many others in the trade, hates the phrase "package tour") have become too low. The initial reaction to these claims must, of course, be: 'Too low for whom?'

"No one can deny that the revolution in package holidays over the past five years has been brought about by lower prices. In themselves the rates have broadened the overseas holiday market to everyone's advantage. I firmly believe that we have reached the current stage of market development only through the low-price policies of the major companies.

"I believe this formula will be followed for a few more years yet. Prices will rise, of course, as inflation forces supply and salary bills up. All of us will have to meet these rises. But there will be bigger savings possible, too. The wide-bodied

aircraft will be here soon. This in itself will help peg price escalation."

The key to the whole question is load factors, both in aircraft and hotels. The whole point of the debate both now in Cannes and throughout the year in Britain, is that the "break point" in load factors has been edged up so much that it is now totally unrealistic.

## True light

When one considers that a scheduled aircraft on a normal route would probably break even at 60 per cent. seat occupancy, that a London hotel is making money with 65 per cent. or more of its rooms filled, and that a day train like the London-Glasgow Royal Scot needs only to sell one-third of its seats to be worth running, the tour operators' need for a 90 per cent. airline-hotel occupancy rate can be seen in its true light.

Mr. Harry Chandler, the ebullient and financially successful owner of the Travel Club, today produced some fascinating figures on the existing air charters. He compared the costs of a charter to Basle in 1961 with a similar operation today. Then, a Metropolitan aircraft with 44 seats would have cost £860 to charter at a unit seat cost of £15. The break-even load factor was 75 per cent. On an 80 per cent. load the profit per passenger was £1.20 and at 95 per cent. £4.20. The gross profit on an 80 per cent. load carrying 5,600 passengers in a series was £6,000.

Today, the same charter, using a BAC One-Eleven, would cost £1,320 for 119 seats and the unit seat cost has fallen to a shade over £11. But the break-



A mock-up of the wide-bodied A-300 B European air-bus, due to make its first flight next year. Such aircraft could make a big impact on the economics of the package tour business.

even point is 90 per cent. and at an 80 per cent. load there is a £1.56 loss. Assuming a growth to 20,000 passengers in a series, the profit on a 95 per cent. load factor is over £13,000, but the loss on an 80 per cent. factor is £31,000.

Slight miscalculations on package tour costings to-day can have a dramatic effect on profitability. Companies like Lunn Poly and Lyons recently, and Thomson a little while ago, lost hundreds of thousands of pounds through over-optimism in adding capacity combined with a failure to produce the necessary bookings.

What is true of aircraft is also true of hotels. Unable to convince many Continental hoteliers that they are not completely mad, some British operators have built hotels them-

selves in order to reduce the bed-rates and mark-ups. In recent weeks I have spoken to several hoteliers in both the Caribbean and Europe who have said they have no intention of becoming involved in the British package market "because it would leave me with only a 1 per cent. return on capital."

## Sacrifice

Gullick of Clarkson's argues that it is worth sacrificing a return on capital for the moment because of the need for growth. The profits will be reaped in due course. "The revolution in travel is by no means over. Bigger profits lie ahead for us all. But let us get more people abroad before we start worrying about how the fruits of victory should be shared."

must be in a position to reward its shareholders and to accumulate reserves for new investment and to build up professional management structure."

Certainly there is a lot of criticism from the retail trade about the airline economies of tour operating to-day. There is a strong feeling, which the tour operators consider to be unjustified, that narrow margins mean that tour operators are inevitably inflexible in dealing with problems. There is not much in the kitty to deal with unforseen or unsuitable hotels or mishandled flights. The reason the retail agents are upset is that it is they, handling as they do more than three-quarters of the business over their own counters, who have to deal with complaints in the first instance.

Unfortunately the major tour operators are highly sensitive. Any suggestion of underpricing is immediately taken as either an attack on the service offered or dismissed as "a misunderstanding of what this business is all about."

Clarksons particularly, which should carry 720,000 people on holiday next year and around 900,000 the year after that, feels that it is being attacked for creating a huge business when it should, in fact, be consensual.

As usual there is the problem of dealing with a situation in which there is right on all sides. There can be little doubt that some of the smaller operators are complaining simply because the pace is becoming too hot for them. But people like Global and Horizon are not in this position. Both these organisations are expressing the desire to see travel compared with other activities. Horizon will go public in the not-too-distant

future; it is also bidding for Thos. Cook and so is in no position to see profit margins squeezed too hard in the present package tour race. Global is a subsidiary of Guinness and as such has to convince the group that it is producing a fair return. While both of them might be able to afford to keep pace, as Thomson has done quite deliberately, neither are particularly happy about the way it is having to be done.

As Mr. Gullick suggested there is no question that tour prices will continue to rise in future years. If only because of rising costs rather than rising margins. Most of the big operators recently agreed to pay their airlines 5 per cent. more for next year's charters. Thomson reckons to be paying its hoteliers in Spain 5 per cent. more each year—wages and other overheads rise continually.

## Built in

The question being argued over here is whether prices should be raised by rather more than increased costs would suggest and whether, if this was done, it would have an appreciable impact on the rate of growth in the industry.

Although Cannes is no place for a decision on this matter—indeed any such decision would be illegal—there is a strong feeling here that prices will rise and that there is enough built in growth to ensure that the market as a whole will not suffer. The question now is what has the courage to make the first rises, and by how much? The answers to these questions will be seen in the brochures for 1973 and the balance sheets of 1974.

## Labour News

### ASTMS hits General Accident staff move

BY MICHAEL HAND, LABOUR CORRESPONDENT

THE LONG BATTLE by Mr. Clive Jenkins' union to win recognition from one of the major insurance groups, General Accident, reaches a crucial stage this week with a bid by the union to persuade the company's 9,000 employees to withhold support from a staff association being set up with the management's blessing.

As a result of an intensive campaign to organise insurance workers, the 220,000-strong Association of Scientific, Technical and Managerial Staffs, of which Mr. Jenkins is general secretary, now claims to have full negotiating rights with 16 insurance companies and to have 40,000 members in this field.

#### 'No negotiation'

It puts its membership at General Accident at more than 3,000, about a third of the total staff. But the company, while denying that it is hostile to ASTMS, says it will not negotiate with the union until it has a majority of the staff in membership. Two years ago the union's agreement rejected a report by the Commission on Industrial Relations in which it said General Accident should grant imperative rights in the union.

The company deals mainly with staff committees, which at present are transforming themselves into a staff association with a new constitution and rules which they hope would enable it to operate as a registered organisation under the Industrial Relations Act.

It is proposed to have a monthly subscription of 20p and 20p, according to age, which would be deducted from members' salaries. ASTMS subscriptions for male members in insurance go up from 45p to 55p a month from January next year. Women pay 30p a month less.

Details about the proposed association will be given to the staff at meetings during working hours to-morrow. But in the meantime they will receive a letter from Mr. Maurice Reynolds, ASTMS insurance national secretary, urging them to reject the staff association and support the union.

In his letter Mr. Reynolds argues that the association is unlikely to be accepted on to the new register because, he says, it is neither fully independent nor democratic. He maintains that it will not initially be financially independent of the management, its registered office will be in or near the company's headquarters and that management representatives will help supervise elections. His charge that the association will not be full negotiating rights is based on the amount of power to be vested in its national executive. He also says it will lack the experience and services of ASTMS.

#### Company view

But Mr. Tom Roberts, the company's assistant general manager, said yesterday that the staff association aimed for complete financial independence and "has not asked us for a bean." It had not approached the company for the use of an office but if it did he did not see that this would make it any less independent. Management involvement in voting had been sought by the association itself, presumably because it would be immaterial in elections involving staff.

In its letter ASTMS contrasts the management's refusal to recognise the union without a clear man from the staff with its decision to recognise the proposed staff association even before it has any members.

As well as casting doubt on the staff association's eligibility to register under the Act, the letter implies—although it does not say so specifically—that ASTMS will not deregister. It says: "ASTMS will under the Industrial Relations Act be able to gain full negotiating rights with General Accident." If it did try to do so it would risk coming into conflict with the TUC's policy of non-cooperation with the Act.

### Stormont warning that Ulster economy is being damaged

BY JOHN GRAHAM

BELFAST, Oct. 12.

THE NORTHERN Ireland Cabinet met this morning at Stormont. As always the security of the Province dominated the meeting, but later in the day there was yet another Ministerial warning—the third in five days—about the damage caused by the present situation to Northern Ireland's economy.

Mr. Robin Ballie, Minister of Commerce, said industry in Northern Ireland was being increasingly affected. While the existing industrial base was almost intact, he emphasized that economic life was no more amenable to a long-haul strategy against the terrorists than was the political or social fabric of the country.

#### Border roads

In a formal answer to a Parliamentary question he said that he had no doubt that the situation had deterred a number of companies from proceeding with applications to set up in Northern Ireland. "There must also be many more potentially

interested firms, which never reached the stage of making a formal application for aid because of their fears about the wisdom of investing here at the present time."

The Cabinet meeting was devoted primarily to the Government's new plans to improve security, specifically its intentions with regard to the border. There has not been any formal statement yet about blowing up some or all of the unapproved roads that cross the border, but it is universally accepted here by but it seems that the last that this is the next stage and that it will happen very soon.

Mr. John Taylor, junior Minister for Home Affairs, said to-day that blowing craters in these roads would stop hit and run attacks, although it would still be possible for people to carry guerrilla from the South into Northern Ireland. Mr. Taylor has been advocating such action for some time.

In the Commons this afternoon he said that last year there were 155 explosions in Northern Ireland, in the first quarter of this year there were 65, in the

second quarter 125, and in the third quarter 306. Up to the end of September more than 7,000 lbs of gelignite have been used illegally in Northern Ireland—31 times the amount used all last year.

#### Army searches

The Army is continuing fairly intensive searches for wanted men. At least 15 men have been "lifted" in the last 24 hours. Exact figures are hard to come by but it seems that the last week's haul must be approaching 50 men. The Army claims that this is a measure of their increasing success against the terrorists, as is the very large number of bomb hoaxes which now keep them busy, rather than actual explosions.

There was a box of a sort to-day in Belfast, when what looked like a bomb was placed in a road and soldiers came under automatic fire. A gun fight developed in the road, and the 15th Ulster Infantry had to evacuate everyone from the houses. There were no casualties.

### North Atlantic airlines may meet soon on fares impasse

BY RAY DAFTER

THERE IS a strong possibility that north Atlantic airlines will come together in Europe later this month in a further attempt to avoid a "free-for-all" over transatlantic fares.

Lausanne, Switzerland, is being widely tipped as the venue for such a meeting, starting on October 26 or 28, although a spokesman for the International Air Transport Association, the body which would have to convene the meeting, said in Geneva yesterday that as yet a conference had not been officially arranged.

But in view of pressure from a number of airlines, some of which have been actively canvassing a meeting, and the European Civil Aviation Commis-

sion (ECAC), which comprises the national government civil aviation officials, a meeting seems most likely.

It is expected that the first two days would be taken up with policy matters followed by several days, possibly a week, in full session.

Airlines hope that the impasse, caused by the refusal of the West German airline Lufthansa to accept fare rates agreed at the IATA meeting in Geneva yesterday, will be resolved by early November. New rates come into effect on February 1.

A spokesman for Lufthansa said in Cologne that the airline had heard that ECAC had decided to urge national carriers to get back to the conference table, although no official approach had been made to Lufthansa.

It had also heard, again unofficially, that there was to be an IATA conference at Lausanne. "If we are invited we shall certainly go," he said. "But no new offer has so far been made to us and until we get a reasonable offer we shall abide by our present position."

IATA, which is holding a fares conference in Miami covering other world-wide routes, has already decided to postpone negotiations on mid-Atlantic routes until the outcome of the north Atlantic situation is known.

In a £5,033 sale at Boobam's of a pair of 15th century Ligerian mirrors. The total was £13,625. Top price at Phillips' £12,293 of Charles Peers' 1738 and Catherine Peers' 1741 both in gold brooch pendant frames were bought by a member of the Peers family for £350. Three cameo scent bottles went for a total of £215 to Wheaton.

### Leyland recalls some Marinas

BY JAMES ENSOR

THE Austin-Morris division of British Leyland is recalling about 1,600 of its 1.8 TC Marinas for modification to the front suspension. The cars involved are those produced up to July. Since then the modified suspension has been in full production on all 1.8 TC Marinas.

There is no suggestion of any defect in the suspension which might contribute to an accident. But Press reports have been critical of the roadholding of this model and British Leyland has decided to modify all those that it has sold to bring them up to the blither standard set by its latest version.

Originally the 1.8 TC Marina shared the same suspension geometry as the less powerful 1.6 and 1.3 Marinas. With the greater power from the twin-carburettor engine, the 1.8 TC Marina could be induced to understeer on sharp corners. The modifications made to the current production model are claimed to cure this defect.



### ALPINE... the snazzy little restaurant just off Bruton Street?

You're wrong... but all is forgiven. Alpine to the well informed means Double Glazing... the best! Alpine is the largest independently owned Double Glazing Company in the United Kingdom and still growing despite the prevailing economic situation affecting so many companies. You are going to hear a lot more about the remarkable growth of this dynamic organisation. Thousands of the well informed are investing in Alpine for comfort and warmth. Our units are handmade with the finest materials possible. Only anodised aluminium frames are used, they never rust, corrode or need painting. Installations are guaranteed for 5 years.

Take a good look at Alpine today... and the great future it has to share tomorrow.

# alpine

...not just Double Glazing...the best!

Member of the Alpine-Exeter Group of Companies  
Member of the Insulation Glazing Association.

Please let me have details as soon as possible

Name.....

Address.....

My phone number is.....

**AG** Alpine (Double Glazing) Co. Ltd  
Lowther Road, Queensbury, Stannett, Middlesex  
Telephone: 01-264 3311

### BSA cool over unions' joint-action plan

BY PETER CARTWRIGHT, MIDLANDS CORRESPONDENT

FULL-TIME union officials yesterday met the new management of BSA in Birmingham to discuss the financial situation of the company and to see how projected redundancies of 3,000 among the 4,700 workers could be minimised.

Suggestions of a joint approach to the Government received a non-committal reply, however. "The company appeared on to be receptive," Mr. George Wright, engineering group secretary of the Transport and General Engineering Workers' and afterwards, "We are most concerned at the general attitude that is prevailing. It is one that does not inspire us, but we are nevertheless determined to save as many jobs as possible."

Mr. George Evans, district secretary of the Vehicle Builders, one of the four other main unions represented at the meeting with Mr. Brian Eastace, the new chief executive, and Mr. N. Rogson, representing management con-

sultants Cooper Brothers, complained of lack of consultation and alarmed at its extent, he said. It will add about 12 per cent. to the numbers employed in the city.

Whether help could be given by the ECED seems doubtful. The Department's concern, by and large, is to guarantee financing to the extent a company exports, and in this respect BSA is plainly in a difficulty.

Other Labour News Page 28

## Saleroom

### Chinese art fetches £14,419

AT SOTHEBY'S the first session of a two-day sale of Chinese works of art realised £14,419. Bidders gave £400 for a rare green jade waterpot. A Chien Lung period jade figure of a Phoenix went to Sung and a carved hornbill to Burton for £380 each.

To Sotheby's bookroom, the second session of a two-day sale of part one of a collection of literature relating mainly to Australia, realised £7,084, making £13,638. James gave £300 for Blaise's Report of the Commission of Inquiry into the State of the Colony of New South Wales 1822-23 and £280 for Hawkinsworth's An Account of the Voyages Undertaken for the Discovery of the Southern Hemisphere in 1773, and Edwards for a first edition of Hearne's A Journey from Prince of Wales's Fort to Hudson's Bay to the Northern Ocean. 1795.

A Cologne double thaler of Gebhard II (1577-1583) was sold at Christie's to a private collector for £500 in a sale of English and foreign coins, orders and decorations, which totalled £10,040.

A proof specimen set of George VI 1937 coins from a gold £5 coin to a farthing went for £380 and a proof specimen set of Edward VII 1902 coins from a £5 coin to a Maundy penny for £210, both to Fonda. Spink paid £260 for a Japanese Order of the Chrysanthemum badge.

Christie's sale of English drawings and watercolours totalled £10,531. Joseph Mallord William Turner's Hulse in an Estuary in pencil and blue wash went to Fry for 240 gns. and John Mond's HMS Essex, Captain George Jackson and Other Shipping in grey washes to F. Sabin for 300 gns.

In a £5,033 sale at Boobam's of a pair of 15th century Ligerian mirrors. The total was £13,625. Top price at Phillips' £12,293 of Charles Peers' 1738 and Catherine Peers' 1741 both in gold brooch pendant frames were bought by a member of the Peers family for £350. Three cameo scent bottles went for a total of £215 to Wheaton.



# Grattan looks to the second half

REFLECTING THE effects of the postal strike, group pre-tax profit of Grattan Warehouses (mail order) contracted from £3,434,000 to £3,060,000 in the 26 weeks to August 14, 1971.

The remainder of the year can be expected to produce more normal trading conditions and profits in the second half should be higher than those of the same period of 1970, the directors state. Pre-tax profit for all the year to January 31, 1971 was £7,485,000.

They consider the trading results for the 26 weeks as being "satisfactory taking into account the seven-week postal strike". They have accounted in full for all known costs of the strike, no proportion being deferred to the second half of this year.

It is estimated that on the interim turnover of £23,674,000 gross earnings were reduced by approximately £480,000—extra-ordinary expenditure was incurred to help offset the effects of the strike and targets planned for an increase in turnover of 10 per cent. or more for the period could not be achieved. At the same time many expenses were geared to the planned volume growth and could not be saved or scaled down.

The agreed mail order system continues to be popular and effective and the post office strike "has not done anything to change our confidence in its future," the directors state.

An unchanged interim dividend of 10 per cent. is declared. The 1970-71 total was 281 per cent.

Grattan has shown plenty of resilience through the postal strike, even if stock losses on the purchase tax cuts, included in these figures, were considerably lower than for Empire Stores. Margins fell by nearly a point to 11 per cent. in the second half of last year, which took in hefty warehouse awards, warehouse development and an element of double costs in computer systems. With these pressures, 1970-71 profit levels may be at least maintained over the year, since industry sales are up by about 8 per cent. In the past three months and Grattan is presumably doing better than that. Justifying a p/e of around 21 at 286p is, however, a different problem.

Statement Page 27

## Clear Hooters

GROUP PRE-TAX profit of Clear Hooters expanded from £38,282 to £152,570 in the year to July 31.

### INDEX TO COMPANY HIGHLIGHTS

| Company           | Page | Col. | Company            | Page | Col. |
|-------------------|------|------|--------------------|------|------|
| Babcock & Wilcox  | 23   | 7    | Gerrard & National | 23   | 3    |
| Barcoora Tea      | 23   | 3    | Grattan Warehouses | 22   | 1    |
| Belgrave Mills    | 23   | 3    | Greiff Chemicals   | 23   | 5    |
| Booth (Charles)   | 23   | 4    | GUS                | 24   | 1    |
| Boulton (William) | 22   | 2    | Harrison (T. C.)   | 23   | 1    |
| Clear Hooters     | 22   | 1    | Holt Products      | 22   | 4    |
| Collier (S.)      | 23   | 5    | Lesney             | 22   | 5    |
| Colmore           | 24   | 2    | LMS                | 23   | 4    |
| De Vere Hotels    | 22   | 7    | Marks & Spencer    | 23   | 1    |
| Diamond Stylus    | 24   | 4    | Ocean Steam Ship   | 24   | 1    |
| English China     | 23   | 2    | Tremletts          | 22   | 3    |
| External Trust    | 22   | 6    | Tyzack (W. A.)     | 24   | 3    |
| Forward Trust     | 23   | 2    | Weeks Trailers     | 24   | 5    |

1971, and the dividend is doubled to 20 per cent.

When reporting a first-half profit of £37,000 (loss £10,000) the directors said profits should be similar for the second half.

Meeting, Nuneaton, November 30 at 3 p.m.

## W. Boulton 22% and scrip

AGAINST the forecast of maintenance of 20 per cent. William Boulton (Holdings) is raising its dividend total to 22 per cent. on capital increased by a one-for-four rights issue for the year ended June 30, 1971, with a final of 15 per cent.

A one-for-two scrip issue is also proposed. The favourable profit trend envisaged last November has continued and group profit, before loan stock interest and tax has advanced from £323,500 to £402,984. At the halfway stage the figure was £161,174 against £158,550.

Turnover 4,969,734 £152,570  
Profit 402,984 £323,500  
Loan interest 11,225 7,000  
Taxation 128,659 114,470  
Net profit 263,090 142,120  
Dividend 152,570 142,120  
Minority shareholdings 1,500 1,500  
Attributable 152,570 142,120  
Dividend 152,570 142,120

Principal activities include the manufacture of machinery for the

ceramic, chemical, food and process industries, non-ferrous foundries, general engineers and high duty ironfounders.

comment

Justifying mid-term confidence, second half pre-tax profits at William Boulton have increased 371 per cent., pushing the full year's results up by 31 per cent. (or 26 per cent. excluding the Stelley acquisition). Sales rose by 17 per cent. but the group also had a combination of price increases (up on average 10 per cent.) and few fixed price contracts. WB has escaped the general capital equipment slump because its interests are spread evenly over a number of industries from ceramics to food processing and effluent treatment. However, it may not entirely escape unless capital spending picks up before February 1972, for it has only enough orders to keep up the present rate of growth till then. So fully diluted earnings at 30p a share (after adjusting for interest savings of £30,000 from last May's rights issue) give an unambitious p/e of 12.9 at 39p (up 6p)—though this caution may be justified by events.

## Tremletts to beat forecast

FIRST HALF profits from Tremletts have shot up from £58,000 to £287,000, and the year's forecast of at least £450,000 should be comfortably exceeded, reports the chairman Sir Rolf Dudley-Williams.

When comparing the two half results, he points out, it should be remembered that 1970 included pre-acquisition profits of Sizer

group, and 1971 includes Rose-downs group acquired on March 2.

The chairman says the major contribution has come from Rose-downs, which looks to be in for a particularly successful year.

Tremletts is in a strong position to make acquisitions, with cash and investments exceeding £600,000. The group offers specialist engineering services to the oils and proteins, provender mill-ing, agriculture and engineering industries.

Earnings per 25p share are shown at 3.3p (2.1p). In accordance with the stated policy of conserving shareholders' funds to facilitate acquisitions, no interim dividend is proposed. For 1970 there was a single payment of 5 per cent.

## No Holt Products interim

A FIRST HALF loss of £85,000 has been incurred by Holt Products and there is no interim dividend payment. For the same 1970 period, profit was £144,100, after tax of £117,500.

For all the year to January 31, 1971, the interim was 12p per cent., followed by a 7p per cent. final. Pre-tax profit for that year was £434,531.

Chairman Mr. M. R. Holt says that, as he pointed out in his statement for the year 1970-71, commissioning costs of the distribution depot at Bedford and the factory at Barry have seriously affected the results for the first half.

A number of executives had to be moved and staff had to be engaged and trained. The settling down period at Bedford has taken longer than anticipated but both units are now operating smoothly, he adds.

In spite of the postal strike, sales increased by 23 per cent. and margins were maintained.

Mr. Holt tells members the company now has the facilities it needs to ensure continued growth and a major operation has been mounted to bring operating costs to a level which will restore profitability. The group operates as makers and distributors of automotive chemicals, accessories and repair products.

comment

With profits plummeting by nearly £300,000 to £453,000 in the

| Company              | Current payment | Date of payment | Corr. Div. | Total for year | Total last year |
|----------------------|-----------------|-----------------|------------|----------------|-----------------|
| Apex Properties      | 16              | Nov. 16         | 15         | 16             | 15              |
| Babcock & Wilcox     | 41              | Nov. 29         | 41         | 41             | 41              |
| Barcoora Tea         | 12              | Nov. 24         | 12         | 12             | 12              |
| Bata Matang          | 40              | Dec. 4          | 38 1/2     | 38 1/2         | 38 1/2          |
| Charles Bax          | 5               | Nov. 15         | 5          | 5              | 5               |
| William Boudou       | 15              | Dec. 2          | 13         | 13             | 13              |
| Clear Hooters        | 20              | Dec. 1          | 10         | 10             | 10              |
| Colmore Investments  | 3               | Dec. 3          | 2          | 2              | 2               |
| Consolidated Gold    | 74 1/2          | Dec. 3          | 4 1/2      | 7 1/2          | 7 1/2           |
| De Vere Hotels       | 10              | Dec. 6          | 9          | 9              | 9               |
| Dooklat Tea          | 24              | Nov. 19         | 10         | 10             | 10              |
| Gerrard and National | (c)15           | Dec. 8          | 10         | 10             | 10              |
| Grattan Warehouses   | 10              | Nov. 19         | 10         | 10             | 10              |
| Greiff Chemicals     | 10              | Dec. 8          | 5 1/2      | 5 1/2          | 5 1/2           |
| Harbury Tea          | 7 1/2           | Nov. 26         | 8 1/2      | 8 1/2          | 8 1/2           |
| Holt Products        | nil             | Dec. 6          | 12 1/2     | 12 1/2         | 12 1/2          |
| Investment Trust     | (b)18           | Nov. 11         | 11         | 11             | 11              |
| Irish Glass Bottle   | 9               | Nov. 11         | 9          | 9              | 9               |
| Kenast               | 11              | Nov. 24         | 11         | 11             | 11              |
| Lampa Minlog         | 20              | Jan. 14         | 20         | 20             | 20              |
| Marks and Spencer    | 28              | Nov. 2          | 28         | 28             | 28              |
| W. A. Tzack          | 16 1/2          | Nov. 2          | 16 1/2     | 16 1/2         | 16 1/2          |
| Ocean Steam          | 14              | Nov. 30         | 14         | 14             | 14              |
| Roast Harvesters     | 15              | Nov. 24         | 15         | 15             | 15              |
| Tower Assets         | (g)12           | Nov. 11         | 11         | 11             | 11              |
| Tremletts            | 21              | Dec. 1          | 21         | 21             | 21              |
| Union Corporation    | 14 1/2          | Dec. 1          | 14 1/2     | 14 1/2         | 14 1/2          |
| Weeks Trailers       | 6               | Dec. 1          | 6          | 6              | 6               |

\* Equivalent after allowing for scrip issue. † Amount per share.  
(a) Tax free. (b) On capital increased by rights and/or acquisition.  
(c) To reduce disparity. Minimum 40 per cent. total forecast.  
(d) Minimum 10 per cent. final forecast on capital to be increased by one-for-five scrip issue. (e) Minimum 10 per cent. final forecast. (f) Total 18 per cent. forecast. (g) As forecast at time of re-organisation last May. (h) To reduce disparity. (i) Includes 16 1/2 per cent. bonus.

last two years and now a first-half turnover of £350,000 to losses. Holt's image has really taken a battering. The latest setback, although partially expected, pushed the shares down 8p to at least a ten-year low of 36p. Difficulties in getting the right sort of labour at the new Bedford factory seem to have been the root of the present troubles although it is probably fair to say that by undertaking such a sizeable expansion programme, both at home and overseas, the group has overextended itself. However, Holt could not be seen to flinch at the end of the tunnel which, coupled with the new investment in a recovery phase. In the meantime, sales in the second and better half, taking in the winter period, have been strong. The group's stable owing to a glut of stock left around as an aftermath of last year's mild winter. Nevertheless, on balance the shares look quite enough for a gamble on recovery prospects.

Statement Page 27

## Lesney first half recovery

ON SLIGHTLY improved sales of £654m., against £523m., Lesney Products made a trading profit of £370,000 for the 24 weeks to July 18, 1971, compared with a loss of £15,000 incurred for the corresponding period in 1970. After depreciation, etc., there is a substantial recovery of £183,000, against £488,000, before crediting £3,000 (1970 £10,000) tax relief. The overall effect of the tax relief will be governed by the results of the further 28 weeks trading.

Consideration of the declaration of an Ordinary Interim dividend is deferred until January 1972. No payment was made for the year to January 31, 1971, when a loss of £1,226,498 was incurred.

For the six months ended September 30, 1971, revenue earned on the Ordinary shares was £55,583 compared with £37,918 for the corresponding period and £138,386 for all the year ended March 31, 1971. It was equal to 0.87 per cent. (1.01 per cent. and 2.37 per cent. in 1970).

Valuation of investments including net current assets was £7,720,535 (£7,436,238 at March 31, 1971) and net asset value per £1 Ordinary 134p (129p). This includes 100 per cent. of the investment dollar premium where applicable £1,237,104 (£1,025,102).

Additional action has been taken for the North American divisions to operate on a profitable basis and current indication are "encouraging" despite losses included in the half-year.

Marketing services director, Mr. G. Frankom, yesterday said the future looked brighter, although slightly clouded by the uncertainty in the world currency markets.

He confirmed that Lesney was still interested in the companies of the Livers Brothers Ltd. (Frog, Pedigree Dolls and Rovers) now in voluntary liquidation. The company was extremely

# Vaal Reefs Rights at 36 for 100

The terms of the foreshadowed rights issue of Vaal Reefs Exploration and Mining Company have now been fixed. A total of 3m. shares of 50 cents each are being offered to holders registered on October 15 on the basis of 36 new shares for every 100 held at 36p per share (equivalent to about 358p per share). The shares closed yesterday in London at 420p.

Arrangements have been made for Anglo American Corp. to underwrite 70 per cent. of the issue. Union Corp. 20 per cent. and Johannesburg Consolidated Inv. 10 per cent.

It is anticipated that dealings in the new shares will start in London on October 18 for special settlement on October 28.

## BONCHORD RIGHT TERMS

The foreshadowed rights issue by Bonchord will be for a total of 3,47m. Ordinary 5p shares, of which will be offered to holders registered on September 30 on the basis of one for five at 13p per share. It is anticipated that a final dividend of 9 per cent., on the increased capital, will be paid.

## SHORT TERM LOCAL LOANS

Arrangements have been completed for the placing of the following local authority loans: County Borough of Brighton (£1m.), County Borough of Burnley (£1m.), Borough of Chesham (£1m.), Borough of Kidderminster (£1m.), County Borough of Rochdale (£1m.), London Borough of Southwark (£2m.), County Borough of Wolverhampton (£1m.), Staffordshire County Council (£1m.), Pembrokeshire County Council (£1m.) and Gwent County Council (£1m.).

The London Borough of Lewisham (£1m.) and County Borough of Burnley (£1m.) are both issuing 5p per cent. Bonds due April 15, 1972, also at par, while the London Borough of Havering (£1m.) is issuing 6 1/2 per cent. Bonds due October 17, 1972, at par.

Battle Rural District Council (£1m.) is issuing 6 1/2 per cent. Bonds due October 16, 1974, at par and the County Borough of Warrington is issuing 6 1/2 per cent. Bonds due October 15, 1975, at par.

Brokers Phillips and Drew with Morgan Grenfell placed the Lewisham and Battle Bonds while Eater Ryder placed the Gwent Bonds in association with Cater (Brokers), S. G. Warburg and Co. handled the Rochdale, Southwark and Manchester loans and, through the agency of Long Tili and Colvin, the Havering, Burnley, Chesham and Wolverhampton loans and, on the introduction of Chas. B. Buxton (Brokers), the

## NEW DEALINGS

Dealings started yesterday in the Ordinary 25p shares of Davies and Newman. Offered at 140p the shares opened at 135p and closed at 131 1/2p.

The John Lewis Properties 9 1/2 per cent. Mortgage Debenture stock issued at 58p gained a 1/2 point yesterday to 58 1/2p (25 paid). The coupon and issue price of the stock (in which dealings started on Monday) were incorrectly stated yesterday.

## CENTEX

The 1,811,518 shares of Centex Corporation Common Stock (par value \$25 per share) have been sold. The underwriting group for the issue was headed by Merrill Lynch Pierce Fenner and Smith, Goldman Sachs and Co. and Eppier Guerin and Turner.

## OFFICIAL QUOTATIONS

Permission to deal in and quotation for the undermentioned securities has been granted by the London Stock Exchange and General Investments: £300,000 New Ordinary shares of 50 cents each, fully paid, issued by East Rand Consolidated—From October 15, 1971, for deferred settlement on October 15, 1971. New shares of 10p each, fully paid (nd paid). Ordinary shares of 10p each, fully paid. Amalgamated Investment and Property Company—After allotment, 25,575 shares of 30p each, fully paid (ranking for dividend from April 1, 1971). Bonchord—After allotment, 3,470,000 Ordinary shares of 5p each, fully paid. Electric and Coldwater—After allotment, 600,000 Ordinary shares of 25p each, fully paid. Greenfield White and Co.—After allotment, 317,500 Ordinary shares of 25p each, fully paid.

## comment

In line with its year-old promise to maintain the growth rate in the 1970s, De Vere has increased dividend profits by 22 per cent. in the first 9 months. The true test is that the market was looking for more than the 15 per cent. jump pre-tax turned in after higher charges and the shares hit a new high of 187 1/2p to 188p last night.

group has increased its bedroom capacity by 15 per cent. this year and planned additions to existing hotels will add another 20 per cent. or so by early 1972. While practice regarding associates, but before it can attain complete conformity it has yet to resolve the problems arising from the different accounting and management conventions related to those companies.

## UNIT TRUSTS

£4m. Growth Bonds offer by M & G

The M & G Group announces the offer of M & G Guaranteed Growth Bonds to a total of £4m. Issued by M & G Trust (Assured) these new Bonds give the investor an accumulation rate of 7 1/2 per cent. net—equivalent to 12 1/2 per cent. gross to those paying income tax at the current standard rate.

The effect of this growth rate, which is fully guaranteed, is that the investor doubles his money in ten years and trebles it in fifteen. The Bonds can run for any number of years between five and fifteen and at the end of the term the investor can take his proceeds either in cash or in the form of a pension.

The minimum investment is £1,000 and the maximum £50,000. The offer is for a limited period only, closing on November 5, or less than 10 per cent. are forecast in the enlarged capital. A total in order of receipt.

## INTERIM STATEMENT



## Interim unaudited results for the 12 months to the 31st March 1971

(as previously announced the year end has been extended to the 31st October, 1971).

|   | 1971       | 1970       |
|---|------------|------------|
| Net Revenue before Taxation   | 5,231,109  | 1,796,239  |
| Preacquisition Profits attributable to Subsidiary Companies acquired during the year, before taxation | 1,147,906  | 48,648     |
| Taxation  | 4,083,203  | 1,747,591  |
|   | 1,129,968  | 658,387    |
|   | 2,953,235  | 1,089,204  |
| Minority Shareholders Interests etc.  | 713,883    | 12,158     |
| Net Revenue attributable to Holding Company   | £2,239,352 | £1,077,046 |

Interim dividends totalling 11% in respect of the 19 month period to the 31st October, 1971 have already been paid. Total dividends for the year ended 31st March, 1970 were equivalent to 8 1/2% on the present share capital.

NOTE: These figures do not include the results of Great West International Equities Ltd., which Company was acquired by Tri-ec Corporation Ltd. after 31st March, 1971, nor do they include Star's share (28.3%) of the pre-tax profits of its associated company, Centre Hotels (Cranston) Ltd., which, after deducting dividends received, amount to approximately £163,000.

As we said yesterday...

## There are still those who've never heard of GMR

Others already know we are a £multi-million group operating six divisions and employing approximately 2,500 people

Facilities within the six divisions cover:  
Industrial Rubber, Asbestos and Plastics  
Steel Stockholding and Metal Processing  
Tubes, Fittings and Fabrications  
Drop Forgings and Heavy Duty Castings  
Nuts, Bolts, Screws and Rivets  
Light Engineering, Pressings and Toys  
Materials Handling Vehicles and Equipment  
... and serviced by a transport fleet of more than 400 vehicles

Control of supplies from all divisions is closely integrated to give customers full advantage of our services.

The Central Manufacturing and Trading Group Ltd.  
Halesowen Road, Dudley, Worcs. DY2 9NR.  
Tel: Cradley Heath 69434 & Cradley Heath 67611. Telex 33-310

GMR











MINING NEWS

# Gold Fields does no worse than expected

BY LESLIE PARKER, MINING EDITOR

THE FALL of 15 per cent. in the net profit of the Consolidated Gold Fields group for 1970-71 to £15.5m. for the year to June is almost exactly in line with the worst of the share market's expectations for a period in which practically all the world's major mining houses were heading for lower earnings owing to a factor completely outside the control, namely the universal setback in metal prices.

This is an influence the end of which has yet to be seen. Copper, which provided 11 per cent. of Gold Fields' 1969-70 revenue, is still to turn the corner. The full effect of the platinum slump, a 6 per cent. element in the 1969-70 figures, will be felt in 1971-72. On the other hand, Gold Fields is fortunate in that its paramount gold element is still prospering while another important influence on its fortunes, iron ore, also continues to do well.

Then it is probable that the means of the Asarco deal, which has been held off the American Zinc last year, will be a factor in the best out of the market conditions. The £2.25m. investment in the Asarco deal, which is still slightly higher than that for 1969-70.

It is a figure which has to be read in the context of the belief, held as recently as last March, that in the metal conditions of the time a lower 1970-71 income from this source was almost inevitable. Also not to be forgotten is the fact that the group's chief copper, the Mount Lyell, has warded off the effects of the metal price fall by forward dealings on the London Metal Exchange.

Needless to say, Gold Fields is maintaining its trend with a final 4.4p making 73p which comes out of net earnings equal to 13.51p a share compared with 12.52p for 1969-70 after allowing for the year's rights issue. Yesterday, Gold Fields rose 7p to 185p; their further improvement, along with most other mining finance shares, depends primarily on the speed at which recovery in the world demand for metals develops.

## HARTEBEEST & ZANDPAN

At long last the Anglo-Transvaal group's Hartebeestfontein gold mine is to go ahead with the scheme to absorb its neighbour Zandpan in the same group. Formal application has been made to the South African Government for approval of the plan whereby the consideration will be £15.15m. (£8.5m.).

This is to be satisfied by Hartebeestfontein's liability to repay Zandpan's existing loans of £8m. and issuing of 2.2m. shares for the balance of £7.15m. The share issue is equivalent to approximately one-third of the £21.5m. value of the Hartebeestfontein mine. The respective prices yesterday were 155p and 27p.

Meetings will be held in due course at which shareholders will be asked to consider the proposals full details of which will be sent out when State approval has been obtained.

## BISICHI TIN

Following the comments on the high costs and low profits of mining in Nigeria, which were made by Sir Douglas Wainwright, Chairman of the Anglo-Nigerian Tin Mines and value borehole results from the reported here yesterday, Mr. W. Kambanda Nickel property in Western Australia.

They range up to a high 9.79 per cent. in the Hunt shoot, but the value was over only a short intersection of 2.4 feet.

## BIDS AND DEALS

### TRIUMPH BACKING FOR DUNBEE

Shares in Dunbee Combe Marx moved up 5p to 36p yesterday following news that it is to be taken over by Triumph Investments Trust, which will take up 400,000 DCM Ordinary at 75p each on January 1 next year giving it 11.4 per cent. of the enlarged capital.

It will also make available a line of credit totalling initially £700,000 - for approved acquisitions.

Triumph has agreed to act as financial advisers and merchant bankers to DCM. Main activities of DCM are in the fields of toys and games, do-it-yourself, plastic goods and textiles, and the opinion of the DCM Board the injection of the additional capital will facilitate a faster rate of development in these and allied fields.

Shareholders in OCM will be asked to approve the arrangements at a meeting to be called in the near future.

### "FAGS" TAKEOVER DECISION SOON

The Government in Chile is expected to give before the end of this month a decision on whether it will acquire the stakes in the Antofagasta (Chile) and Bolivia Railway Company, reported chairman Mr. W. T. Cluffield at the annual meeting in London.

This solution was in the opinion of the Board in the best interests of all parties concerned and the managing director had handed to the Minister of Public Works the company's financial proposals for approval.

### Meeting Page 26

### MAM BUYS ARTS THEATRE CONCERNS

Two more deals were announced yesterday by Management Agency Wainwright, the quoted concern which has been acting as a broker in the acquisition of the MAM Theatre Group from the MAM and Englebert Humper group.

Joseph Rodgers, principal director of the subsidiary of the group of companies and Wostenholme are engaged in shares.

the ground rather than to extract it at a loss.

Bisichi has been hit by rising costs of materials and wages. The chairman pointed out that the Nigerian Government has imposed a levy on capital. If it continues, Mr. Richards fears that the mining industry will cease or, at best, industry unsupported by capital.

However, Bisichi is about to receive in London a third tin buffer stock repayment of £123,236. The latter figure is equivalent to just over 1p per share and Mr. Richards can be regarded as bearing out the Board's hope of avoiding the omission of a payment. Bisichi were 61p yesterday.

## POSEIDON IS PRESSING ON

A contract worth \$1.5m. (£0.7m.) has been let by Poseidon for construction of site works, a new house, workshop office block and other facilities at its Windarra nickel project in the Territory of Papua and New Guinea. The work is being completed by early in 1972. The company's A. V. Jennings, which won the contract, announced that all main services will be operating by Christmas and the work completed by early in 1972. The news helped to dispel recent suggestions, as discussed in last Monday's Mining Notebook, that development of the Windarra area nickel deposits was being delayed or put off indefinitely.

Poseidon consequently beaded a market rally in Sydney. In London the shares recovered 7p further to 740p, making a rise of 515p over the last three business days.

## HAMERSLEY'S QUARTERLY

One of the Western Australian iron ore giants, the Rio Tinto Zinc group's Hamersley reports a consolidated net profit, after depreciation and future tax, of \$7.64m. (£3.58m.) for the September quarter, compared with \$8.28m. for the same period of last year.

The latest depreciation and tax provisions, however, amount to \$2.44m. against \$1.34m., so that the past quarter from its shipments of ore and pellets which totalled 5.7m. wet long tons against 4.65m. wet long tons a year ago.

Furthermore, consolidated net profits for the nine months to September 30 amount to \$22.25m. (£10.4m.) against \$19.85m. in the same period of last year. This is after deducting \$38.37m. for depreciation and tax compared with \$30.5m. previously.

Ore shipments during the past nine months totalled 15.4m. tons compared with 11.9m. tons in the same period of 1970. Outstanding loans, which are secured by Australian and U.S. debenture stock, amounted at September 30 to \$192m. (£88m.) compared with \$183m. a year previously.

Hamersley is 54 per cent. owned by Conzinc Riotinto of Australia which, in turn, is 80.7 per cent. owned by RTZ.

## WESTERN MINING NICKEL VALUES

The latest quarterly report, covering the 12 weeks to September 13, 1971, shows Western Mining is chiefly notable for further high value borehole results from the reported here yesterday, Mr. W. Kambanda Nickel property in Western Australia.

They range up to a high 9.79 per cent. in the Hunt shoot, but the value was over only a short intersection of 2.4 feet.

## ASSOCIATES DEALS

Keyser Uilmann on October 11 bought 10,000 Moore's Stores at 55p.

K. G. Warburg purchased on behalf of an associate client £25,000 A and S Henry at 110p.

V. F. Carr, sons purchased for associates of Cornwall Property Holdings, 12,500 Alliance Property at 108p.

## WOSTENHOLME "NO"

Directors of George Wostenholme and Sons were quick off the mark last night in describing as "inadequate" a 77-1/2-share bid from Archford Investments, a subsidiary of Cornwall Property Holdings, 12,500 Alliance Property at 108p.

Rodgers, principal director of the subsidiary of the group of companies and Wostenholme are engaged in shares.

## MERTON PARK TALKS

The directors of Merton Park Investment Company say that discussions are taking place with another quoted investment trust company which may lead to an offer for all quoted capital of Merton Park. Until further information is available, holders are advised not to dispose of their shares.

Of more import is hole KDB5192 the Otter Trough which has given values of up to 4.96 per cent. nickel over one stretch of 17.5 feet.

Once again, however, the report is that nickel consumption continued to be subdued in all world markets and supplies of the metal were in excess of requirements. Among Western Mining's other interests, it is stated that a feasibility study is in progress at the Big Hill Creek coal project in Queensland.

## BOUGAINVILLE LABOUR UNREST

Several thousand Australian, British, American and native workers are on strike at the Bougainville Island in the Territory of Papua and New Guinea. They are demanding segregated canteens following a fight at Bougainville. RTZ is reportedly resisting the men's demand for segregation because it cuts across a carefully developed multi-racial policy that has been cultivated since 1964.

The news helped to dispel recent suggestions, as discussed in last Monday's Mining Notebook, that development of the Windarra area nickel deposits was being delayed or put off indefinitely.

# Premium gold sales

THE TALE of rising revenue from the sale of gold on the open market at premium prices during the September quarter was continued in yesterday's reports from the South African mines of the Johannesburg Consolidated and General Mining groups.

Moreover, Buffelsfontein reveals a sharp jump in earnings from uranium, stated to be the result of additional sales over and above the original quotas. The profit from this source of £2.37m. compares with £2.8m. in the June quarter. Tax takes a considerable slice of the extra revenue but the net surplus of £2,071,792 is well up from the £2,241,010 in the preceding period.

Unfortunately, this is cold comfort for Butts shareholders in present circumstances because heavy capital expenditure needs have already led to an officially predicted dividend cut from 53p cents to about 35p cents for the "time being."

The group's pre-tax results are compared in the attached table. They include premium revenue but not state assistance in the cases of Silfontein, West Rand Consolidated and South West Rand Consolidated.

|               | Sept. | June  | Mar.  |
|---------------|-------|-------|-------|
| Gold          | 575   | 555   | 540   |
| Govt. Areas   | 30    | 11    | 28    |
| Random        | 114   | 122   | 77    |
| Western Areas | 1,186 | 1,022 | 1,000 |

Of the "Johannesburg" group mines, the premium revenue added no less than £740,081 to Western Areas' profit of £445,521 calculated at the \$35 an ounce price for gold. If the extra income keeps up in the final quarter then a modest lift in the 6 cents dividend rate looks possible.

Elsburg states that reef development in its own mining area should be reported by the end of the October quarter. Government Areas has decided to close down all its operations including the production of pyrite. Randfontein is pressing on with the opening up of its new mining area, the Cooke section, with full-scale sinking of No. 1 shaft.

The same field-cutting—and Mr. E. Aarons, Archford's chairman, maintains a merger would be commercially advantageous.

The Wostenholme directors, advised by Singer and Friedlander, urged holders to take no action until they saw more information. Before the bid was launched, shares were standing at 55p on the Northern Stock Exchange. The terms value Wostenholme at about £260,000.

Archford is being advised by Owanay Oay, another offshoot of MAM.

## GUS INCREASES STAKE IN HENRY

Although the Board of A. and S. Henry has given its blessing to the 100p share offer by United Drapery Stores, it now looks as if Great Universal Stores is in a strong position to come from behind and win the take-over battle.

GUS has been a regular buyer of Henry shares in the market recently and has now pushed its stake up from an original 27 per cent. to around 42 per cent. However, GUS has given no indication that it intends to buy more shares and it could be that it is waiting to see whether UDS will extend or no unconditional with its bid which closes on Friday.

GUS's own bid does not close until the following Wednesday, October 20.

If GUS continued to buy Henry shares in the market, and it has paid up to around 110p a share so far, it could well end up with enough shares to go unconditional. On prices paid so far, this would mean that GUS would have to "top up" its offer to around 100p per Henry share.

## Union Cpn. tonic

In difficult times for mining finance houses, heady half-year results from Union Corporation—Consolidated net profits up to £2.48m. (£3.53m.) against £2.26m. a year ago when the total reached £12.59m.—need to be watered down. And the conservative South African mining finance house bears out this view with an unchanged interim of 4 cents (2.5p).

The eye-catching figure is a share-dealing profit of £2.3m. compared with only £0.3m. in the first half of 1970 and a total for that year of £0.6m. Such profits, and losses, it is coyly explained, are subject to wide variation. On this occasion it looks as though Union Corporation may have taken the opportunity to part with some of its gold shares (Winkelbaek) when the market was buoyant in the spring.

If so, a mining house with such strong gold ties may well have made only a temporary separation from some of its gold holdings, moving back in again during the recent setback in prices. And it is suggested that the year-end investment written-down provision could be £1.6m.

At all events the past half-year's share-dealing profit can be regarded as exceptional while the corporation states that the current year's investment income is likely to be "slightly less" than the £13.43m. received from this source in 1970. Even so, it will be surprising if the total 1971 profits do not show a comfortable increase on those for the previous 12 months.

## MINING BRIEFS

MALAYSIA TIN—September: Tin ore sold 5.3 tons (August: 5.8 tons). Workings to about 700 tons.

ELECTROLYTIC ZINC OF AUSTRALIA—Four weeks ended September 22: Zinc West, 12,964 tons; West Coast Mines, 17,738 tons; lead concentrate produced 1,271 tons; zinc concentrate produced 1,251 tons; copper concentrate produced 1,068 tons.

## APPOINTMENTS

# Mr. David Donne is chairman of Shipton Automation



Mr. David Donne

Mr. David Donne, deputy chairman of SHIPTON AUTOMATION has been appointed chairman to succeed Mr. David Nicolson.

Mr. Nicolson is resigning the chairmanship of Shipton and giving up many of his other business and industrial activities in view of his commitments as chairman of the British Airways Board.

Mr. A. S. Marburger has been appointed vice-president and general manager of the newly formed European division of NEW ROLLAND (Sperry Rand).

Other appointments to the new division are: Mr. G. Beylier, managing director, Oljon, France; Mr. G. E. D. Whitaker, managing director, Aylesbury, Mr. P. A. O'Brien, director of marketing; Mr. R. Canneels, financial controller; Mr. J. Bappe, director of engineering; and Mr. C. Lomoye, general manager, Zedelgem, Belgium.

The European division will also be responsible for the Midland East and a large part of Africa.

Mr. D. W. Mangan and Mr. J. G. Stancliff have been appointed to the Board of ST. REGIS PAPER COMPANY (U.K.), a subsidiary of the St. Regis Paper Company of the U.S. and parent of British Siskitraft and Tiltmoss & Son.

Mr. F. French has been appointed to the Board of SOMERSONS ELECTRIC COMPANY as purchasing director.

Sir Cecil Mait, previously Controller-General of the Ministry of Public Building and Works, has joined MANAGEMENT ANALYSIS.

Mr. A. G. E. Spears has been appointed director to HERON MOTOR GROUP.

Mr. Peter J. Ouff has been appointed managing director of CARAVANS INTERNATIONAL BEDFORDSHIRE BUILDING SOCIETY.

Mr. S. E. Cohen has been elected president, and Mr. S. Causton, chairman, of the NATIONAL SOCIETY FOR CLEAN AIR.

Dr. Bernard Rastrick has been

have been appointed chairman and managing director respectively of FORWARD TRUST (SCOTLAND). Other directors of this new Forward Trust subsidiary are Mr. G. R. Tipping, Mr. A. R. Macmillan and Mr. G. M. Young.

Mr. Richard Meadows has joined the Board of N. CORAH (with MARGARET) as director with special responsibility for marketing.

Mr. C. H. Hudson has retired as chairman and director of STERNOL. Mr. E. T. Malindine has been appointed chairman and managing director.

Mr. O. Yeoman, at present manager of the Liverpool office has been made deputy manager of the STANDARD BANK.

Mr. P. Stansfield, formerly manager of the London Wall branch and Mr. E. G. H. Bower, accountant at the City office have been made assistant managers.

Mr. Franklin J. Cornwell, of St. Louis, U.S., has been elected a director and chairman of Monsanto Company's British subsidiary, MONSANTO CHEMICALS and MONSANTO TEXTILES, both headquartered in London. He will succeed Mr. John C. Gerrels who retired at the end of 1971. Mr. Cornwell will move to England shortly to take up his new position.

Mr. Stephen Redfern has been appointed to the Board of OAW NAY OAY, merchant bankers, where he specialises in corporate finance.

Mr. Ivor Jacobs and Mr. Ken Young have been appointed directors of GEORGE COHEN SONS LTD., a member of the George Cohen 600 Group.

Mr. K. A. H. Knight has been appointed executive deputy chairman of SCHWEPPES LIMITED, the drinks group of Cadbury Schweppes. He will be in executive control of sales, marketing, product development and customer relations.

Mr. O. L. T. Oppé has joined the Board and become chairman of the EXTERNAL INVESTMENT

TRUST. Mr. E. W. L. Palamoun-tain, Mr. L. E. Lasker, Mr. M. R. Block and Mr. D. N. Robertson have been appointed directors. M and G Securities have been appointed managers and registered in the company in place of Kleinwort Benson. Mr. P. M. Stokes has succeeded Mr. G. A. Howard as secretary.

The registered office of the company has been transferred to Lee House, London Wall, EC2. Mr. M. C. Devas, Mr. D. M. C. Donald and Mr. I. M. L. D. Forde have resigned from the Board.

Brigadier James Hill, vice-chairman of Powell Oufryn, has been appointed a regional director on the Salisbury regional Board of LLOYDS BANK.

The MIDLAND BANK has appointed Mr. A. P. Howitt as corporate planner. He was previously head of corporate planning at Lloyds Bank.

Mr. Howitt's duties will involve introducing and developing appropriate corporate planning systems and procedures for the bank, its regions and branches. He will also be responsible, in conjunction with all levels of management, for the progressive development of integrated strategic, tactical and operating plans.

## CHIEF EXECUTIVE CHANGE AT HOLT PRODUCTS

Mr. M. A. Griffith-Jones, the managing director of HOLT PRODUCTS, has resigned that post but retains his seat on the Board.

His position of managing director is being taken over by Mr. John Parkin, who has resigned as chairman and managing director of Twining Crosfield and Co., a subsidiary of Associated British Foods, to join Holt Products.

Mr. R. W. Gurney, financial director of Twining Crosfield, has become managing director and chief executive of the Twining Group.

Mr. S. H. G. Twining, export director of R. Twining and Co., has joined the Twining Crosfield Board.

See Men and Matters Page 20

# Hill Samuel Unit Trusts' latest 5 year gains.

## The attractive figures.

| TRUST   | GROWTH* | YIELD** |
|---|---------|---------|
| CAPITAL   |         |         |
| Growth Trust with shares in leading British Co's.                 | +144.3% | 1.84%   |
| BRITISH   |         |         |
| Balanced Trust investing in 60 British 'Blue Chip' Co's.          | +109.9% | 2.36%   |
| SECURITY  |         |         |
| Balanced Trust invested in over 40 Co's.                          | +93.2%  | 3.00%   |
| INCOME  |         |         |
| Income-producing Trust invested in 70 British Co's.               | +85.1%  | 4.51%   |
| INTER-NATIONAL  |         |         |
| Balanced Trust with portfolio of c. 110 overseas ordinary shares. | +74.8%  | 1.63%   |
| DOLLAR  |         |         |
| Growth Trust invested in leading N. American Co's.                | +51.9%  | 0.62%   |
| FINANCIAL   |         |         |
| Growth Trust with portfolio of shares in financial sector.        | +37.0%  | 1.80%   |

\* Increase in offer price (net income reinvested), 30.9/68 to 30.9/71  
\*\* Estimated gross current yield

## The attractive facts behind the attractive figures.

On the left you can see the latest five-year performance figures for Hill Samuel's seven Unit Trusts. And very handsome they are too, by any standards.

Now, we'd like you to look at something we think you'll find equally attractive. Our facts.

Fact 1. There's a Trust to suit every sort of investor in the Hill Samuel stable. Whether he wants income, growth or balanced performance. Whether he wants to invest at home or overseas. There's even a Trust (Fyvie—not shown) which is designed to help private investment companies avoid double taxation.

Fact 2. All the Trusts can be linked to either of two very attractive Life Assurance schemes. The Fortune Plan or The Fortune Bond.

Fact 3. Units in all the Trusts can be bought through an advantageous share exchange scheme.

Fact 4. "Hill Samuel, the first merchant bank to launch a unit trust back in 1958, has always maintained an impressive investment record with all of its trusts having performed well over the long term." (That's not us talking. It's the Investor's Guide.)

Fact 5. There's a full range of leaflets and brochures, for any or all of the above schemes. You can get them by simply ticking the relevant boxes in the coupon and sending it to us.

Whether you're a professional adviser or an investor in your own right, it would be well worth your while looking at Hill Samuel Unit Trusts.

And that's Fact Number 6.

## HILL SAMUEL

(A member of the Association of Unit Trust Managers)

TO: HILL SAMUEL UNIT TRUST MANAGERS LIMITED, Dept. A2, P.O. Box 123, N.L.A. Tower, Croydon CR9 6AL. Tel. 01-681 1031

Please send me your literature on the items which I have ticked below:

Capital Trust.....☐ Dollar Trust.....☐

British Trust.....☐ Financial Trust (min. £1500).....☐

Security Trust.....☐ Fyvie Trust.....☐

Income Trust.....☐ Fortune Plan and Bond.....☐

International Trust.....☐ Share Exchange Scheme.....☐

NAME.....

ADDRESS.....

PROFESSION.....



## IMMIGRATION BILL IN THE LORDS

## 'Restrictions have led to increase in number of bogus students'

BY OUR PARLIAMENTARY STAFF

ONE OF the consequences of the reduction in the number of employment vouchers for immigrants in recent years had "led to a considerable increase in the number of bogus students," said Lord Windlesham, Minister of State, Home Office in the Lords last night when the House continued its debate on the Immigration Bill.

Baroness White (Lab.) moved an amendment to provide that where students from overseas could prove that they had been accepted by an educational institution, they should not be sent back to their homes before they had exercised right of appeal.

Lord Windlesham said Britain admitted something like 16,000 Commonwealth citizens a year. "In the very great majority of cases no difficulty has arisen." The rights of students, though, had to be balanced with the attempts of those determined to evade immigration control. "This is one of the two main avenues of abuse. Under the pressure of people to come to the U.K. for settlement and work from certain countries in the Commonwealth it is not surprising that some, whose real intention is to settle here permanently, should try to enter in the guise of students."

The amendment was withdrawn and the Bill passed its second stage.

Lord Brockway (Lab.) objected to one of the grounds on which the Home Secretary might deport a non-patrial—that the deportee "be conducive to the public good." Saying it was "terribly vague," he moved an amendment substituting the words "national security" for "public good."

Free discussion of political issues was one of the cherished British traditions and he would not like someone who was raising political issues in this country to be liable to be deported unless these issues were a danger to national security.

Lord Windlesham, Minister of State, Home Office, said this power, which had existed for many years, would continue to be exercised with restraint. There had been very few cases in recent years and nearly all those deported under this power had been convicted in criminal courts.

Lord Brockway withdrew his amendment. Baroness White (Lab.) moved an amendment to ensure that the wife, or other members of a man's family ordered to be deported, should not automatically be deported with him.

Baroness Emmott of Amherst (C) said: "This part of the Bill offends women's organisations in this country very much indeed. The logical conclusion of what the Government proposes is that when a wrong-doing husband is deported, his wife should go too."

This Council did not go so far as Baroness White. "The Government has had to introduce this power for those cases where the woman had no right to remain and refused to leave the country when her husband was deported."

Also, a wife would not be deported if she had entered Britain under her own right and not the right conferred by her husband. The amendment was defeated by 106 votes to 61 (Government majority 45).

The Third Reading will be taken on Monday.

## Air traffic congestion

THE serious delays to aircraft over Europe this summer were mainly attributable to restrictions imposed by Continental air traffic control centres, said Lord Drumalbyn, Minister without Portfolio, in the Lords yesterday.

He told Earl Amherst (L): "We are exploring with the French, and other administrations concerned, means of reducing delays."

Lord Amherst had said that, because air charter operators were not usually required to file advance flight plans with air control authorities, as operators of scheduled services were required to do, air space in Europe became highly congested.

Lord Drumalbyn replied that all flight operators using the air traffic control service were required to file flight plans not less than 30 minutes before the intended flight, whether it was a scheduled service or a charter operation. The only difference was that operators of regular flights, whether scheduled or charter, were able to file flight plans in bloc not less than 14 days in advance under the British stored flight plan system.

## 'Shadow' Cabinet meeting to-day on Market vote

BY PHILIP RAWSTORNE

LABOUR'S "shadow" Cabinet will meet at the Commons to-day to decide what recommendations it should make to the Parliamentary Labour Party about the crucial vote on October 28 on entry into the Common Market.

Pro-Market leaders among party leaders are hoping that some formula can be devised which while endorsing the conference vote against entry, will include a "conscience clause" allowing them to abstain or vote with the Government.

But after the furious Left-wing reaction to Mr. Wilson's apparent offer of a compromise—later denied—at Brighton last week, the chances of a deal seem to have receded.

Many anti-Market leaders, apart from those on the Left, are saying that the conference decision must be reinforced by the actions of the Parliamentary party. The party, in their opinion, must make its opposition to entry on the Government's terms clear beyond all doubt.

In such an atmosphere, the determined pro-Market leaders conclude that their best chance of weathering the inevitable storm is to keep their heads down, vote or abstain according to their convictions on October 28 and then join the opposition to the Government's subsequent legislation.

Any attempt to persuade the PLP, when it discusses the situation next Tuesday, to modify its opposition to accommodate the pro-Market leaders might merely provoke more hostility.

The Government motion on which the vote will be taken is not expected to be published until next week.

Mr. Heath, in his television interview on Monday, quashed any faint hopes of a free vote that might have remained. And Mr. Bob Mellish, Labour chief whip, and Mr. Wilson, are expected to impose a three-line whip.

## Queen's painting among 11 found in Brussels' raid

BY REGINALD DALE

ELEVEN paintings stolen in Britain over the past few months, one of which belongs to the Queen, have been recovered in a raid on an art gallery here by Belgian police.

The pictures were variously estimated to-day by police sources to be worth between £100,000 and £250,000.

The owner of the gallery, M. Georges Cluquet, was to-day arrested on suspicion of receiving stolen goods. M. Cluquet, whose gallery is situated in one of the most fashionable parts of Brussels, denies any knowledge that the paintings were stolen. The paintings belonging to the Queen taken from Hampton Court in September, is attributed to an artist called Juncker and entitled "The Barrack Room." It is said to be worth about £500. Another painting, belonging to the Queen, "The Pig" by 17th century Dutch artist Cornelis Saftleven, stolen from Buckingham Palace last month, was not among the pictures seized here.

The other paintings recovered include still life views of Malta by Van Vitsell and two scenes of Venice by Francesco Guardi. There is also a Renoir landscape. M. Cluquet's premises were raided by the Belgian gendarmes yesterday following an underworld tip-off. Scotland Yard had previously notified the Belgian authorities at the end of last month that five of the pictures now recovered were thought to be in Belgium.

## Action call by Lancs. textile men

By Our Own Correspondent

MANCHESTER, Oct. 12. A CALL for immediate action, including possible "emergency measures" to restore the confidence of investors, employers and workers in the immediate future of the Lancashire cotton and allied textile industry has been made to Sir John Eden, Minister for Industry, by a joint deputation of employers and trade union leaders.

Claiming that the industry was facing "a very serious situation," the deputation said unemployment was rising and was now considerably higher than the national average. More mills were closing weekly, "including some of those which were most efficient and had achieved the highest productivity figures by large investments and the efforts of labour and management."

The deputation was led by Mr. Tom Norman, Conservative MP for Chorley, and president of the British Textile Employers' Association, and Mr. Harry Kershaw, secretary of the Northern Counties Textile Trade Federation.

In his reply, Sir John said he had told the industry earlier this year that it would be a matter of concern to the Government if real damage were being done to the industry as a whole, or to a significant part of it.

"The Minister was extremely anxious that a viable cotton and allied textile industry should be retained in the U.K., and would give immediate attention to the setting up of appropriate machinery to enable the Government and the industry to maintain a continuous survey of the situation," the statement added.

## Mactra judge orders probe of instrument

MR. JUSTICE BRANDON, acting as Wreck Commissioner, said yesterday at the London inquiry into the explosion and fire on board the oil tanker Mactra in 1969, yesterday ordered an investigation into the use of an instrument for measuring dangerous gas levels before the explosion occurred.

He said there were "fairly elaborate instructions for the use of this 'explosimeter' and he thought it important that the matter should be investigated to see whether the instructions were complied with."

Air was being pumped through a tank in the Shell tanker when the explosion occurred in the Mozambique Channel, killing two men. The inquiry continues to-day.

## MUTUAL FUNDS CODE APPROVED

The standards of good practice for administration of mutual funds proposed a month ago by the Federation Internationale des Bourses de Valeurs yesterday received the approval in principle of the London Stock Exchange Council, one of the Federation's leading members.

## INTERIM STATEMENT

## LESNEY PRODUCTS &amp; CO. LTD.

## Interim Statement

The Directors have resolved:—

## Preference Dividend

Half year's dividend of 31% actual payable 31st December 1971 to shareholders on the register at the close of business on 1st November, 1971. The register will not be closed.

## Ordinary Dividends

Consideration of the declaration of an interim dividend deferred until January 1972.

Unaudited figures for the 24 weeks trading ended 18th July, 1971 are:

|   | 1971       | 1970       |
|---|------------|------------|
| Group Sales                                 | £5,337,000 | £5,225,000 |
| Group Trading Profit (loss)                 | 370,000    | (15,000)   |
| Depreciation                                | 368,000    | 378,000    |
| Debiture Interest                           | 82,000     | —          |
| Other Interest Paid                         | 103,000    | 106,000    |
| Loss before Tax                             | (183,000)  | (499,000)  |
| Tax Relief at present available on the loss | (3,000)    | (90,000)   |
| Loss attributable to Shareholders           | £(180,000) | £(409,000) |
| Dividend: Preference                        | 26,000     | 26,000     |
| Ordinary (Interim)                          | deferred   | See above  |

\* The overall effect of the tax relief will be governed by the results of the further 23 weeks trading.

## Current position:

## Outlook

Present indications suggest that the recovery reported above should continue, although the recent widespread disturbance in world currencies in areas where the group trades could create difficulties.

## North America

Additional action has been taken for the North American divisions to operate on a profitable basis and current indications are encouraging despite losses included in the above figures.

## For structural steelwork

## Fairmile-Lilleshall Ltd

Fairmile Lilleshall Ltd.,  
St. George's, Telford, Shropshire,  
TF2 9BB  
Telephone 3120



## AMERICAN EXPERIENCE OF INDUSTRIAL RELATIONS LAW

A Conference on Industrial Relations Problems with special reference to practical U.S. experience of working a similar system to the new British Act

will be held on  
2nd and 3rd November, 1971  
at the Park Lane Hotel, London.

Speakers will include:

J. Brian Bransbury, Chairman, I. R. Committee, Bar Association.  
Elliot Bredhoff, Special Counsel, United Steelworkers of America AFL-CIO.  
George Cattell, Former Director of Manpower and Productivity service, DEP.  
Ewan Clague, former Commissioner, U.S. Bureau of Labor Statistics.  
Victor Feather, General Secretary, Trades Union Congress.  
Robert Livernash, Professor, Harvard Business School.  
J. P. Lowry, Director of Industrial Relations, British Leyland.  
William E. Simkin, former Director, U.S. Mediation Service.  
T. A. Swinden, Director of Industrial Relations, C.B.I.  
Sam Zagoria, Director, Labor-Management Relations, U.S. Conference of Mayors  
and other distinguished experts.

Full particulars can be obtained from  
LEO KRAMER INTERNATIONAL LTD.,  
9, Bryanston Square, London W.1. (01)-723-6772.

## The Antofagasta (Chili) &amp; Bolivia Railway Company

At the Annual General Meeting of the Antofagasta (Chili) & Bolivia Railway Company held in London on the 12th October, 1971, at which a dividend of 1% on the Consolidated Ordinary Stock in respect of the year 1970 was declared, the Chairman, Mr. W. T. Caulfield said that the acquisition of the Company's stocks in Chili by the state was now under active study by the Government as a solution to the problems facing the railway and to this end a commission was in visit Antofagasta in the very near future. This solution was in the opinion of the Board in the best interests of all parties concerned and the Managing Director had therefore handed to the Minister of Public Works the Company's financial proposals for it. A definite decision as to the acquisition is expected from the Government by the end of this month.

## Reliant improves Scimitar GTE

BY JAMES ENSOR

THE Reliant Scimitar GTE, the slightly different has far exceeded supply. The formula of a sports car with large luggage capacity, originated with the MGB GT and soon followed by Reliant, has proved popular. BMW and Volvo have recently introduced models based on cars with high luggage capacity—and it seems to be a highly practical combination.

The GTE promises to continue to sell strongly, despite the fact that its price has been raised to £2,379 for the standard model and £2,484 for the automatic. The price, however, includes a large number of extras such as a radio, a heated rear window, complete with two-speed rear wiper, is also fitted, while spot and fog lamps are available as a factory-fitted option.

The Scimitar GTE will compete closely with the new Rover 3500S which sells for just under £2,000 and a Volvo 164E which is about to reach the British market. Despite its slight price premium, it seems assured of a buyers who desired something good market.

The Scimitar has proved the most successful luxury car that is about to reach the British market. Demand for premium, it seems assured of a buyers who desired something good market.

## HUNTER DOUGLAS GROUP ANNOUNCES CHANGE IN CORPORATE STRUCTURE

The Hunter Douglas Group ("the Group") has announced corporate plans which, when implemented, will result in replacement of the Canadian parent company of the Group by a Netherlands Antilles Corporation, Central headquarters will be at their present location in Rotterdam, the Netherlands, and the new parent company will apply for a listing of its shares on the Amsterdam stock exchange.

The plan of reorganization, which has been approved by the Board of Directors, calls for a transfer of all Hunter Douglas Limited ("HDL") assets to a newly created Netherlands Antilles subsidiary, Hunter Douglas N.V. ("HDNV"), followed by the liquidation of HDL and the distribution of HDNV shares on a 1-for-1 basis to shareholders in HDL.

It is intended that the Extraordinary Shareholders Meeting, which will be asked to approve the reorganization, will be held in Canada on October 25, 1971. This change concerns the legal structure of the Group and place of incorporation of the parent company only. It does not affect the control or management of the Company or its operations.

## Bonus Shares

HDNV, the new parent company of the Group, has declared from capital surplus one bonus share for five common HDNV shares, payable after the liquidation of HDL prior to year-end 1971. The bonus shares of HDNV will only be distributed on the common shares, presently representing about 16% of the outstanding capital of the parent company. The founders and controlling shareholders who hold deferred shares will not receive bonus shares and will therefore correspondingly dilute their holdings.

## Dividend Policy

Management's continuing confidence in the Group's operations and prospects is expressed by this adoption of an annual dividend policy on HDNV shares which will commence with the declaration in 1972 of a dividend of Dfl. 1.00 per share.

## Cash Alternatives

(1) An international banking syndicate led by N.M. Rothschild & Sons Limited and the Amsterdam-Rotterdam Bank N.V. has offered to holders of common shares and Curacao Depository Receipts ("CDR") the opportunity to sell their HDL common shares for Canadian \$ 14.00 per share. This offer is open until 12 o'clock noon on October 25, 1971.

(2) At the same time an offer has been made by the Montreal Trust Company on behalf of the principal shareholder to purchase the bonus shares distributed by HDNV at Canadian \$13.50 per share from all share or CDR holders wishing to sell. This offer is open until 12 o'clock noon on November 12, 1971.

Both offers will depend on the liquidation of HDL and distribution to the shareholders of the shares of HDNV having taken place prior to December 31, 1971.

## Summary of Choices

As a result of these offers, all holders of CDR's or HDL common shares will be given the choice of either:

(1) Receiving upon liquidation of HDL one common share of HDNV for each common share of HDL, plus one bonus share for every five common shares of HDNV. This bonus shares may be sold for Canadian \$13.50 per share.

(2) Or, alternatively, disposing of their holdings in HDL for Can. \$14.00 per share.

## Shareholders Resident in Canada

Due to Canadian legislation becoming effective in 1972, some

Canadian resident shareholders would be at a disadvantage if they were to own foreign securities such as the shares of HDNV distributed upon liquidation of HDL.

A preliminary prospectus has therefore been filed with the Securities Commissions of all Canadian provinces offering Canadian resident holders of HDNV common shares an exchange of these shares on a 1-for-1 basis to voting preferred shares of Hunter Douglas Canada Limited, the Canadian operating subsidiary of the Group.

These preferred shares are exchangeable into common shares of HDNV on a 1-for-1 basis at any time up to December 31, 1990. They are also entitled to a dividend equal to any dividends declared on the HDNV common shares.

## Listing

Application will be made for the shares of HDNV to be listed on the Amsterdam stock exchange.

## Taxation - European Shareholders

HDL and HDNV are companies based in the Netherlands and are subject to Dutch tax legislation. HDL has obtained a tax ruling in the Netherlands under the terms of which the liquidation of HDL and the distribution incident thereto of shares of HDNV are not subject to any direct taxation in the Netherlands either on resident or on non-resident shareholders. Tax counsel has advised that inasmuch as bonus common shares to be distributed by HDNV will be charged against capital surplus they would not be subject to direct taxation in the Netherlands. Furthermore, the above transaction will not have any tax incidences in the Netherlands Antilles to shareholders resident outside of the Netherlands Antilles.

## Results and Outlook

The Group manufactures consumer, building and architectural products, as well as specialized precision machinery. Sales in 1970 were US \$ 129,700,000 and net income after tax US \$ 6,341,000, or US \$ 1.10 per share based on the average number of shares outstanding. In the first 6 months of 1971, net sales rose by 34% to US \$ 77,347,000 and net income by 14% to US \$ 2,755,000 compared to the same six-month period last year. During the past 5 years the Group's annual compounded growth in sales and net income, as well as net income-per-share, has been more than 15%. Based on current sales forecasts and order backlog, Mr. Reple Sonnenberg, President, expresses confidence that this historic rate of growth should be maintained this year.

| Expressed in US \$                                  | 1970    | 1969    | 1968   | 1967   | 1966   |
|---|---------|---------|--------|--------|--------|
| Net Sales   | 129,777 | 107,734 | 87,268 | 68,898 | 61,888 |
| Net income after taxes and minority interest        | 6,341   | 5,980   | 5,105  | 3,405  | 2,899  |
| Net income per average number of shares outstanding | 1.10    | 1.08    | .97    | .84    | .84    |

## Management Comment

The management, expressing its confidence in the future of the company, would like to see the holders of common shares and CDR's in HDL continue their holdings in the Hunter Douglas Group as shareholders of HDNV.

Rotterdam, 11th October 1971

Hunter Douglas Limited

The undersigned, Caribbean Depository Company N.V. (the Depository), Curacao Netherlands Antilles, acting as Depository for Common Shares of Hunter Douglas Limited (HDL), has been informed of the proposed reorganization of HDL and of the cash offer of Can. \$ 14 for Common Shares of HDL and of Can. \$ 13.50 for the Hunter Douglas N.V. (HDNV) Bonus Common Shares as described above in the notice of HDL.

Copies of all documentation relating to the proposed reorganization and cash offer received by the Depository in its quality of holder of registered Common Shares of HDL will be available to holders of Curacao Depository Receipts (CDR's) at the offices of the Agents of the Depository:

|   |   |
|---|---|
| Pierston, Helderling & Pierston<br>Herengracht 214<br>Amsterdam | Amsterdam-Rotterdam Bank N.V.<br>Herengracht 595<br>Amsterdam |
|---|---|

Any holder of CDR's wishing to accept the cash offer for either the Common Shares of HDL or the Bonus Common Shares of HDNV must inform any one of the Agents of the Depository mentioned above by registered letter, enclosing either his CDR(s) when accepting the cash offer for Common Shares of HDL (to be received by the Agents of the Depository no later than October 21, 1971) or coupon(s) Number One of his CDR(s) when accepting the cash offer for Bonus Common Shares of HDNV (to be received by the Agents of the Depository no later than November 10, 1971).

The Depository will then tender for cash such HDL Common Shares or rights to HDNV Bonus Common Shares as are represented by the CDR's surrendered, and the cash will be paid out to the (former) CDR holder by cheque payable at the offices of the Agents of the Depository. Fees and charges payable to the Depository under the terms of the Deposit Agreement will be borne by HDNV.

The Depository will not tender for cash any HDL Common Shares or rights to HDNV Bonus Common Shares represented by CDR's the holders of which have not specifically instructed the Depository to accept this cash offer pursuant to the procedure set out above.

The Depository will make a public announcement addressed to CDR holders who will not have surrendered their CDR(s) or the coupon(s) Number One of their CDR's, as to the manner in which it will make available to such CDR holders the HDNV Common Shares or the HDNV Bonus Common Shares received by the Depository.

Curacao (Netherlands Antilles)

11th October 1971

Caribbean Depository Company N.V.











# INDUSTRIAL FINISHES

FINANCIAL  
TIMES  
SURVEY

## Industry must deal with problems of corrosion

By MICHAEL CASSELL

For the last ten years at least it has been widely assumed that the annual cost of corrosion in the U.K. amounted to something in the region of £600m. The figure has given some indication of the magnitude of the problem, with its attendant drain on the national economy, but this year a new set of statistics have come to light and shown all previous estimates to be hopelessly inadequate.

After two years' work, the Government-appointed Committee on Corrosion and Protection reported in March that the total bill for corrosion and the work done to eliminate it, taking into account such side effects as lost production and the necessity for maintaining standby plant could be, at the very least, £1,365m. every year, or 3.5 per cent. of the gross national product.

Few sectors of industry can escape the ravages of this major problem. The annual cost to the transport industry alone is thought to be as high as £350m, a figure which would be considerably reduced if more trouble was taken to cut down the chances of corrosion at the design stage. The Committee, in fact, suggested that the average life of a car body could be extended by three years given design improvements on most models.

### Scant attention

Another £250m. a year is forecast each year by the construction industry, where some of the leading organisations pay scant attention to the avoidance of the problem. Common faults are the storage of materials in the open and insufficient control of metal finishing standards.

A substantial percentage of these staggering figures could be saved if only current knowledge and techniques were put to better use. The Committee came to the conclusion that a saving of about £310m. a year could be achieved given improved education and a greater awareness of the situation. Steps made in both design and manufacturing stages could be instrumental in helping to cut

the costs, as well as a far greater use of protective coatings. Annual expenditure on these is thought to be running at about £772m. a year with another £620m. spent on resistant materials, though not always specifically for anti-corrosion purposes.

To some extent, the Committee concluded, the present taxation system encourages a low capital investment-high maintenance approach within industry as maintenance qualifies for tax relief. A company, therefore, that is fully aware of the risks of corrosion might deliberately use inferior materials for its plant to minimise capital outlay.

But despite the fact that corrosion prevention is often dismissed in this way or treated as an afterthought, the very immensity of the problem is ensuring that increasingly active research programmes are, in many cases, being maintained. Research and development in corrosion protection is carried out in academic institutions, national laboratories, research associations, development associations and within industry but, as the Committee pointed out, there is generally too little co-operation and interchange of information between all these bodies. Such a situation can lead to excessive concentration on some aspects of the problem but, at the same time, almost complete neglect of others which are equally important.

For this reason the Committee recorded in its report that a national corrosion and prevention centre should be established to reinforce, rather than replace, the wide variety of organisations currently involved in corrosion work. It would be independent of any particular sector of industry and would encourage the exchange of practical problems, existing knowledge and new developments.

At the same time, the Committee urged that more effort should be made to ensure that engineers, draughtsmen, designers and architects all received tuition on corrosion and prevention techniques

which continually change as process within the next few years.

### Development work

There has, so far, been little indication of how the Government will act, if at all, on the Committee's recommendations but in the meantime the research and development work continues. Active work on new paints and remarkable technical advances in electroplating have been recorded and totally new concepts are still emerging. One of the latest is powder coating which is rapidly assuming world-wide popularity. The process involves the electrostatic application of a highly resistant dry powder finish and Britain's first fully automatic plant has already been installed. It is believed that some overseas motor manufacturers are already planning to adopt the new process in their production

process within the next few years. But apart from the development of new techniques, problems are still encountered in getting new products or techniques accepted and one of the major difficulties appears to be the conservatism of the organisations which make use of them. At the same time, however, it seems that some suppliers do not appreciate all the difficulties involved in changing long-established techniques or the extent of the considerable costs involved.

According to the Committee, there have been instances where new products were insufficiently developed and expensive delays and lost production have inevitably followed. These difficulties illustrate another basic problem concerning the establishment of a new product or technique.

Most suppliers operate with restricted profit margins and are not in a position to finance the long-term development pro-

grammes which are necessary if they are to develop new products or techniques. At the same time, consumers are very reluctant to finance work which they do not consider to be within their province.

The major task then would appear to be a comprehensive programme of education which will eventually lead to a thorough understanding of the problems involved. The Committee feels that this could best be brought about with better initial training and with the establishment of a central body which would be able to promote close contact with all the organisations concerned either centrally or peripherally with the question of corrosion and its prevention. It is now over six months since its recommendations were made and it is to be hoped that some positive action is taken as a result of the very clear message which industry has now been given.

The other chief method of correcting potentially harmful waters is aeration at the source. This removes excess carbon dioxide and considerably reduces the "aggression" or corrosive potential of the supply.

A report by the Department of Trade and Industry estimates "conservatively" that the overall cost of corrosion in industry is £1,365m. a year. Twenty-five

## New methods of water treatment

By DAVID GRAYSTON

The Automobile Association recently estimated that rust damage to cars costs £250m. per year—£20 for each car owner. This is a pointer to the cost of corrosion in industry at large to-day. It is small wonder that strenuous efforts have been made over the last decade to combat this menace.

New techniques of corrosion inhibition have been developed in all the major manufacturing countries of the world, and high on the list of priorities has been the development of new methods of water treatment.

The main cause of corrosion is excess acidity in water supplies. This problem is more severe in areas which have soft water because the acidity of such water is markedly higher than that of hard water. Perforation of pipes and blockage of supply systems, together with discoloration, the so-called "red water problem," are the most troublesome aspects of corrosion attack in such areas.

This is redressed by the addition of lime to basic sources. The aim is to stabilise the ratio between alkalinity and chloridity, and this is expressed in terms of the Pb value of the water. If the Pb value does not express a ratio of at least two parts of alkalinity to one of chloridity there is a substantial danger of corrosion. Even water which does not contain excess acidity can be corrosive because of a Pb imbalance.

The other chief method of correcting potentially harmful waters is aeration at the source. This removes excess carbon dioxide and considerably reduces the "aggression" or corrosive potential of the supply.

A report by the Department of Trade and Industry estimates "conservatively" that the overall cost of corrosion in industry is £1,365m. a year. Twenty-five

million pounds of this total is made up by the water industry. The Department also estimates that this vital facet of the industrial scene could save at least £4m. of that figure if "improved awareness of corrosion and protection" could be cultivated.

### Serious problem

The water supply industry is mainly concerned with the production of clear, drinkable water, and the mineral content of water supplied tends to play second fiddle to this consideration. A water Board's only real concern over corrosion is prevention of it in its own plant and supply system. Only half the water Boards in the country consider that corrosion is a serious enough problem to warrant treatment of supplies, and very few are able to estimate the savings that treatment can bring because of natural deterioration of equipment. The Government has estimated, however, that the annual cost of corrosion and protection to the water supply industry is some £18m.

Most water Boards seem only to become aware of corrosion problems via complaints from users, and few Boards and authorities inform consumers when a change of water source is made. Even where they do, the approach is often restricted to industrial users. In spite of this sorry picture of a large-scale lack of communication between supplier and consumer, about 30 per cent. of Britain's water Boards are consulted by local industry on corrosion problems.

Water treatment firms are principally concerned with water for cooling and effluent systems; but are often embittered by the way in which their advice is taken by industry. One such company is concerned with the prevention of corrosion in the cooling towers it supplies, and found that if it recommended the installation of treatment plants in such systems, customers simply assumed that its equipment was inferior and looked elsewhere.

Companies in this field build into their installations allowances for corrosion, and a safety margin of 50 per cent. is not uncommon. This enlightened attitude does not extend much further than specialist concerns, however. The DTI has stated that the range of corrosion awareness in industry extends from "excellent to deplorable," and the Department was especially scathing with regard to general engineering. It said that many companies in this area "want the unobtainable, namely a simple and cheap panacea for all corrosion problems. The major concern in the industry was the avoidance of corrosion during the warranty period, which seldom extends beyond one year."

It is unfair to imply that industry in general is concerned only with "sweeping" problems under the carpet. Many architects and engineers are merely ignorant of the effects of corrosion and possible remedies for it. Their ignorance is extremely expensive, and nowhere more so than in the metal finishing industry. Electroplating equipment is extremely subject to corrosion, yet many firms persist in selecting materials and protective schemes on the basis of an initial-cost standard rather than a whole-life one.

Treatment of heating systems is a bone of contention between the consultants and manufacturers and water Boards. The makers claim that it is difficult to obtain information from Boards on the nature and corrosivity of supplies, and also that because some Boards operate grid systems for dealing with peak demands, the nature of the water supplied is variable. This makes correct protection treatment almost impossible.

Life is difficult for the heating engineer in other ways. The usual treatment for prevention of corrosion in heating systems is the addition of glassy phosphates to the supply. These form a protective coating on the interior of the system, but tend to break down and lose effectiveness after a time because of constant recirculation.

Proper handling of the most common form of recirculatory water system, the car radiator, is vital. The AA recommends the use of tap water in cooling systems, saving gloomily that radiators will rust anyway and so little point is served by the use of distilled water. Anti-freeze mixtures provide the best insurance, but they must be used carefully.

### Chemical freezes

Commercial anti-freezes contain ethylene glycol to prevent freezing; a mixture of three parts of water to one part of this chemical freezes at minus 12 degrees Centigrade. But at high temperatures chemical reactions can cause such a mixture to become acidic and extremely corrosive. Thus all proprietary brands of anti-freeze contain inhibitors. There are, however, three separate British Standards for anti-freeze, because each type only contains inhibitors to protect certain types of metal, and damage can result if the wrong type is used. It is therefore vital to select the right anti-freeze for the engine. The Association adds in passing that the practice of draining car radiators of anti-freeze in summer probably does more harm than good.

It is plain that although all problems of corrosion inhibition by water treatment will not be solved in the near future, the main problem is lack of communication and awareness of what has been accomplished already. Until the darkness has been dispelled we will continue to lose 3.5 per cent. of our gross national product down the drain in the form of corrosion.



Testing the endurance of paint films to different light conditions.

## Rilsan. It just sits there and does nothing.

It doesn't rust. It doesn't wear away. It doesn't chip, flake or peel. It doesn't even conduct electricity. But if you're looking for a really efficient way of protecting metal from corrosion, abrasion or impact, then coating it with Rilsan nylon is the complete answer.

And the best way to find out how well Rilsan performs on your own particular application is to bring it along to our special Technical Centre at Newbury, Berks.

This Technical Centre of ours is devoted to investigating and developing new applications in the field of plastic coatings—particularly those involving our own world-famous Rilsan.

We'll run a coating test for you to determine the best method of coating your application—whether by fluidised bed dipping, electrostatic projection or flocking.

And we'll even stage a pilot production run for you for accurate evaluation purposes.

(By the way, don't worry if your application is unusual: we've Rilsanised everything from lamp-posts to lawn-mowers, from supermarket trolleys to the filter plates of wine presses, from the legs of chairs like the one on the left to the frames of hospital beds.)

So if you've got a product which needs protecting from corrosion, abrasion or impact, bring it along to us and we'll give you an all-action demonstration of Rilsan doing nothing.

And that's really something!

### AQUITAINE-ORGANICO (UK) LIMITED

Technical Centre (Coatings), Kiln Road, Shaw, Newbury, Berks.  
Tel: Newbury 5048  
Head Office: Colthrop Lane, Thatcham, Newbury, Berks. Tel: Kennet Bridge 456/77/8



- \* resists the effects of weathering, acids, salts, hydrocarbons etc.
- \* is resistant to abrasion and impact.

\* has a high dielectric strength and a low coefficient of friction.

Please send me full details of Rilsan and the facilities available at the Aquitaine-Organico Technical Centre (Coatings).

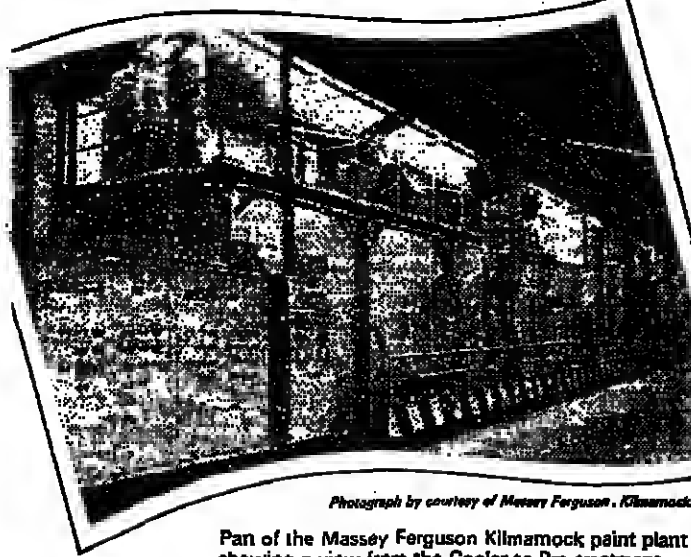
NAME \_\_\_\_\_  
COMPANY \_\_\_\_\_  
ADDRESS \_\_\_\_\_

To: Aquitaine-Organico (UK) Ltd., Technical Centre (Coatings), Kiln Road, Shaw, Newbury, Berks.





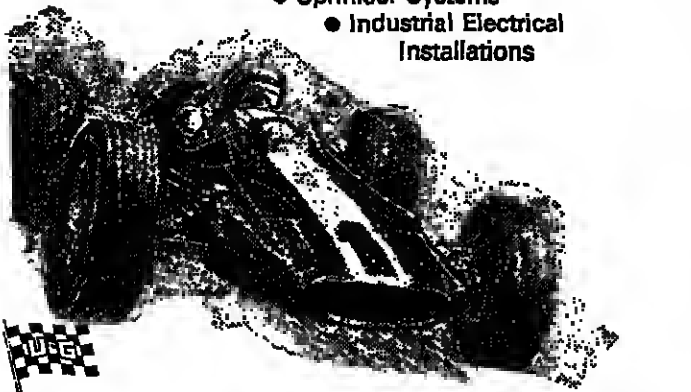
## First and foremost in FINISHING



Photograph by courtesy of Messrs Ferguson, Kilmarnock.  
Pan of the Messrs Ferguson Kilmarnock paint plant showing a view from the Cooler to Pre-treatment.

### Specialists in:

- Pretreatment and Phosphating Plants
- Industrial Stoving Ovens
- Electrocoating Plants
- Heating Ventilating & Air Conditioning
- Sprinkler Systems
- Industrial Electrical Installations



## UNITED & GENERAL ENGINEERING CO (VIC) LTD

Head office: Clevedon House 453 High Road Wood Green N22  
Tel: 01-888 5488/9 5406/6  
Southern office: 304 High Street Croydon 01-888 8253/8  
Midlands office: Lombard House 8 Lombard Street Lichfield Staffs  
054-32 51967/8 52719

## WILLMOTT TAYLOR LIMITED

Wharfedale Road, Tyseley,  
Birmingham, B11 2DL

Telephone: 021 706 1186  
Telegrams: LIMITS BHAM

### "PRESBRITE"

CHROMIUM Plated Steel Strip in Coil

NICKEL Plated Steel Strip in Coil

BRASS Plated Steel Strip in Coil

COPPER Plated Steel Strip in Coil

HOT DIPPED TINNED

Steel Strip in Coil



WE'VE got a thousand success stories behind our name—we're backing a new one every day. Companies in the plating business who deal with us have told us our service is top class, our communications excellent, our research and advisory departments very helpful and, most of all, our products the best they can get. We blush with pride, but, secretly, like to think that all this praise is somewhat justified. After all we've spent a long time earning it.

Enjoy your success with ours—be a Harshaw client and feel like we do—proud of your product.



**HARSHAW CHEMICALS LTD**  
P.O. BOX 4, DAVENTRY, NORTHANTS. Tel: 021-27161



DESIGNERS AND MANUFACTURERS OF ALL TYPES OF ELECTROPLATING EQUIPMENT - INCLUDING THE ORIGINAL "ELECTROGLIDE" TRANSPORTER SYSTEM

## ELECTRODEV ENGINEERING CO. LTD.

PRODUCERS AND MANUFACTURERS OF ELECTROPLATING CHEMICALS INCLUDING "COLD CHROME" AND THE "ROHCO" RANGE OF BRIGHTENERS AND PROCESSES FOR ZINC AND CADMIUM.

## ELECTROCHEMICAL DEVELOPMENTS LIMITED

DENINGTON INDUSTRIAL ESTATE  
LONDON ROAD, WELLINGBOROUGH, NORTHANTS.  
TEL. WELLINGBOROUGH, 4034, 5 4155, 6

## INDUSTRIAL FINISHES II

# Importance of dipping and spraying processes

By HUGH COLVER

The report of the Committee on Corrosion and Protection, commissioned by the Department of Trade and Industry and published earlier this year, quoted the astronomically high figure of £1,385m. as the annual cost of corrosion in Britain. It added, perhaps surprisingly, that about £310m. of this could be saved by the more effective use of existing knowledge.

This latter figure was surprising, perhaps, but it does illustrate that although this is a technically advanced industry, the manufacturers who should use the new finishes and techniques devised by the paint companies and in the research centres are a little slow to accept them. This often comes down to a question of cost, and it is difficult to persuade the man who is working on a tight budget with tight production schedules that a little extra cost can make all the difference to the life and look of his product.

The life of the industrial finishes technologist is further complicated because he has to deal with a wide variety of materials, which have to operate in widely differing environments and are often expected to look attractive at the same time. His job becomes one of compromise—he has to evolve the finish which can be easily integrated into the production process and give the required protection without pushing the cost too high. There are other factors, too, like devising coatings for items which will

change environments at various stages in their life—like cars and containers—and colour consistency throughout a run and from run to run.

In achieving his compromise solutions, the technologist in this industry has inevitably arrived at "favourite" techniques that are easily adapted to individual needs. Two of these techniques are dipping and spraying, and both are employed in two distinct ways to achieve the overall corrosion resistance required—pretreatment and finishing. Particularly in the pretreatment of metals, the two techniques are also used together.

### Rust staining

This pretreatment side is especially important. It is rarely sufficient to paint a metal, whatever job it is intended for, without pretreating to reduce rust staining, remove grease and oxide or to etch, as in the case of aluminium. The main pretreatment processes involve alkaline cleaners, chemical cleaners, derusters, phosphates and chromate coatings, and spraying or dipping is invariably the means of application. According to material and future use the dip is done hot or cold and the spray is applied in various ways. The time under dip or spray can also be critical.

The economics of metal preparation and painting has been a major concern of industrial finishes technologists for a long

time. The cost of these two phases in a production process can be five times the cost of the paint itself in household goods and 25 times for large structures like ships. So it is not just a question of making the materials used cheaper. What is more important is that the method of application should be quick, that the equipment used should not be too costly or require highly skilled labour and that factors like drying time are watched carefully. Other problems like toxic hazards with spraying have also to be taken into account.

These are the kind of problems the researchers have had to solve in recent years. Hot airless sprays have now been developed into wider use, mainly because of the speed of application, economy of paint and lack of excessive overspray. Electrostatic spraying, in which—in one method—the object to be painted is earthed, attracting charged paint particles flung from a disc revolving at high speed, gives good paint coverage results and is ideal for searching out all the hidden points in products of complex shape like car components and domestic appliances.

### Paint tank

In applying finishes by means of dipping in a paint tank, technical advance has also played their part, too. A recent swift movement through the paint cycle

Electrodeposition systems, like ICI's Electrocoat, show many advantages over conventional painting methods. These systems have excellent stability and throwing power and show very real savings in labour, material and plant, cutting out several phases of the traditional cycle. The motor industry has adopted the system widely and in the case of Electrocoat, plants throughout the world process about 15,000 bodies per day and at any one time there is 1m. gallons of Electrocoat in dip tanks round the world.

The decision as to whether an item should be sprayed or dipped is a difficult one for the manufacturer. Here, he has to rely on the advice of the technical representative of the paint company. Geoffrey Smith, National Sales Manager of Goodlass Wall's Industrial Sales Division, says: "We do very much more than sell them the paint and leave them to get on with it. We have to advise at every point along the way. Every manufacturer's need is different and we have a large technical staff to support him."

However, research in this industry is not just a question of developing the various dipping and spraying techniques and possessing the technical knowledge to know when to apply them. New materials play their part, too. A recent step forward is a finishing product for architectural needs

known as Fluoropon. Developed in the U.S. by the De Soto Corporation, Fluoropon is a fluorocarbon or but-dipped galvanised steel. In the U.S. Metal Finishing will be holding examinations for the qualification of graduate members of the Institute for the first time next year.

Goodlass Wall have recently obtained a licence to produce Fluoropon and the first building in Britain to use it is a new office block for Simon Engineering at Stockport which is now under construction. It is interesting to note that the architect who that building had already chosen another material before being shown Fluoropon. He was impressed enough to make a change.

Fluoropon can be used for coil

coating hot dipped galvanised steel or aluminium and also for spray application to hot dipped galvanised steel and aluminium extrusions. Very high dirt resistance is claimed and the usual tests in Florida—one of the most testing environments for finishes—have been highly successful.

It will be apparent that in both pretreatment and finishing, spraying and dipping are key techniques, and since the method and material employed in pretreatment and finishing has a great effect on the properties and resistance ability of the coated item, the importance of this aspect of industrial finishes should not be underestimated. The increasing demand for a high level of technical skill among metal finishing technologists is illustrated by the fact that the Institute of Metal Finishing will be holding examinations for the qualification of graduate members of the Institute for the first time next year.

However, in the light of this emphasis on high technology there are those in industrial finishes who see marketing as just as important. If some of that £1,385m. is going to be saved, they realise it is not enough to develop the techniques—the user industries have to be persuaded that the guaranteed corrosion resistance for ten years at fairly high cost is better than short term price change.

**CONWAY COATINGS LTD.**  
Landywood Lane,  
Cheslyn Hay, Walsall,  
Staffordshire  
Tel: Cheslyn Hay 415142 &  
415167  
(Bescot Depot: Walsall 20141)

Specialists in Coil Coating  
Paints and General  
Industrial Finishes  
Represented in many  
European Countries

CABLES  
"CONWAY WALSALL"  
MEMBERS OF THE EUROPEAN COIL COATING ASSOCIATION

## ALLSHEET METAL COMPANY LIMITED

Design  
Manufacture  
Install

Industrial ovens of all types  
up to a maximum working  
temperature of 500°C. Metal  
Pre-Treatment Plant, complete  
Finishing Systems.

MARKET PLACE, GREAT BRIDGE,  
TIPTON, STAFFS. DY4 7AT

Tel: 021-557-4402-3  
Telex: 338771 Tipton

## PURE ALCHEMY CORILLIUM GOLD

Corillium is a new kind of gold plating. It has three to four times the hardness of traditional gold plate but can be produced at a fraction of the cost. You still use gold—the finest 22 carat—but it's absorbed into the surface of the recipient metal, chromium or stainless steel, not just deposited on top. The actual amount of gold absorbed is microscopic but Corillium gives the identical rich, warm characteristics of normal gold plating. Corillium plated items have a wear resistant factor equivalent to an ordinary gold deposit of between three and six microns—this is in excess of Swiss standards and indeed substantially more than the deposit normally applied to bathroom taps, etc. Corillium has been developed and patented in the U.S.A. and its applications are enormous, hollowware, car ornaments, bathroom fittings, electrical contacts, to name just a few. Its wearability and price makes it commercially viable with items that are normally chromium plated.

Your company could be the first in its field to offer Corillium gold finished articles to its customers. Phone 021-558 0672/3 and we'll show you how to increase the sales appeal of your products, with the pure alchemy of Corillium gold.

SOLE OUT-PLATING CORILLIUM LICENCES FOR THE MIDLANDS

THE REIVE POLISHING & PLATING CO. LTD.

40 ANNE ROAD, DAVENTRY, NORTHANTS. Tel: 021-27161

Specialists in the Electro-Deposition of Copper, Nickel, Chromium, Zinc, Van and Barred Programmed Automatic Plating, Anodising, Brightening, Colouring.

## Improved techniques in electroplating

By ANDY McELROY

Protecting or embellishing metal parts by electrically depositing a thin layer of another metal is a process almost as old as electricity in industry.

Quite simply, electroplating is merely a matter of placing the object to be plated together with a cathode of the metal being deposited in a bath of electrolyte. When a voltage is applied between the two electrodes, metal passes from the anode to the cathode so that a layer of metal, whose thickness is a function of the current and the time it flows, is deposited.

Easily the best known process in this category is chromium plating, widely used for bright parts for cars, domestic equipment, and for food manufacturing equipment. Chromium itself, however, although decorative, affords very little protection against corrosion, since it is porous to water vapour. If full protection is required, therefore, it is necessary to deposit a layer of impervious nickel before applying the chromium.

### Wide variety

Within the last 25 years the number of applications of electroplating has grown considerably so that now it is common practice in many industries to use it as a means of combining the surface properties of one metal with the properties, such as cheapness, mechanical strength under compression or tension, of another. In this way the metal parts manufacturer has at his disposal a wide variety of composite materials.

Quite recently, some of the common electroplating processes have been replaced by metal spraying, although this newer technique tends more to be used with combinations of metal where electrolytic deposition of metals is unsuitable for one of a variety of reasons.

Development of electroplating tended, in the early years, to concentrate on improving the quality of the anodes and the formulation of the electrolytes. In addition, companies specialising in this field have established working parameters covering such things as bath temperature, pH value and optimum current which allows a good finish to be

obtained on even the most difficult substrates.

At one time it was commonly believed that, since the process depended on the migration of metal ions from one electrode to the other, geometrical properties were unimportant. But experience with plated parts, where it was found that the coating had a very short life at sharp curves and on edges soon altered this way of thinking.

Now, it is accepted that the plating of complex shapes requires both the equipment and the electrodes to be carefully designed. There are a number of cases on record, in fact, where it has been necessary to construct equipment specifically for one type of component.

Although the thickness of the layer deposited depends, as has been said, on the current flow and the duration, there are differences in coating quality, mainly porosity, depending on the balance between these two. At present, research is being conducted to try to improve the quality of coatings while allowing the plater to use a high current, and therefore have his plating equipment used to the maximum effectiveness.

A high degree of mechanisation is already evident in the plating industry, including complete pretreatment, plating and rising installations which require no manual intervention.

The British Steel Corporation claim that plastic coated steel and modern techniques save time and money. Food for instance, tinsplate is traditionally one of the principal materials used for packaging processed foods and other products. It is good. But it is not unchallenged as the only protective coating for steel. For some years now, in addition to improving tin as a coating there have been efforts to discover an alternative.

The British Steel Corporation in Wales found the answer to the high cost of tin (fluctuating between £300 and £1,800 a ton) was a mixture of chromium/chromium oxide coatings deposited electrolytically from chromic acid solutions. These were developed in Japan; the Steel Company of Wales have the licence for the U.K. It is in the lacquered or decorated form that this has its widest range of applications. In lacquered form it can be compared in performance with tinsplate for many applications, and the fabrication methods available.

For plastic coated steel, the

Obviously, such installations only justify their high capital cost when the throughput of work is high, but several features of these plants are applied to smaller types of equipment suitable for occasional use within a company which does not itself specialise in plating.

### Automatic control

Among these features are automatic control of bath temperature, current level and duration of plating. By controlling all of these parameters very closely, it is possible to obtain a surface of pre-determined and consistent quality. Another feature that has been increasingly developed is continuous withdrawal of the waste products from the tank and replenishing of the electrolyte. Elimination of by-products and maintenance of bath composition keep the incidence of defects very low and provide a constant speed of deposition of the plating material.

In the face of competition from other processes, notably improved sprayed or dipped finishes, the industry has continued to develop new applications and better methods of applying standard treatments. Most notable of the former type is electroplating of non-conductive materials such as plastics. This process, in its early years, suffered from poor

film adhesion to the substrate, but it is now being used widely to provide brightwork for many industries, including the motor industry. In this application, and on equipment such as decorative panels on washing machines, refrigerators and television sets, as well as toys, parts made of plated plastics have the advantage that they are corrosion-free, even when the surface film is damaged.

Extensions of the methods of electroplating typified by plastics processing are providing the equipment manufacturers with scope for extension into new fields that is allowing them to counteract the slight erosion of their business in more traditional fields. Periodically, plating is subject to pressure from alternative methods, but in the main the competition from these is short-lived, usually because of the versatility and comparative ease of use of plating equipment.

Now, it is common to see plating being carried out by completely unskilled staff, while the quality remains high. In its efforts to grow the equipment industry will continue to devise simpler ways of plating to a high standard, and concentrate much of its research into plating a wider range of materials.

## Savings in coated steel

By JACK HAY

The British Steel Corporation claim that this process adds productivity and saves time and money.

Food for instance, tinsplate is traditionally one of the principal materials used for packaging processed foods and other products. It is good. But it is not unchallenged as the only protective coating for steel. For some years now, in addition to improving tin as a coating there have been efforts to discover an alternative.

The British Steel Corporation in Wales found the answer to the high cost of tin (fluctuating between £300 and £1,800 a ton) was a mixture of chromium/chromium oxide coatings deposited electrolytically from chromic acid solutions. These were developed in Japan; the Steel Company of Wales have the licence for the U.K.

It is in the lacquered or decorated form that this has its widest range of applications. In lacquered form it can be compared in performance with tinsplate for many applications, and the fabrication methods available.

For plastic coated steel, the

British Steel Corporation again say that this process adds productivity and saves time and money. Food for instance, tinsplate is traditionally one of the principal materials used for packaging processed foods and other products. It is good. But it is not unchallenged as the only protective coating for steel. For some years now, in addition to improving tin as a coating there have been efforts to discover an alternative.

The British Steel Corporation in Wales found the answer to the high cost of tin (fluctuating between £300 and £1,800 a ton) was a mixture of chromium/chromium oxide coatings deposited electrolytically from chromic acid solutions. These were developed in Japan; the Steel Company of Wales have the licence for the U.K.

It is in the lacquered or decorated form that this has its widest range of applications. In lacquered form it can be compared in performance with tinsplate for many applications, and the fabrication methods available.

For plastic coated steel, the

Ebbw Vale and Port Talbot incorporate these latest advances for the first time in Britain. They utilise a sophisticated method that substitutes gas knives for coating-rolls, to give a more consistent performance during fabrication.

A corrosion protected steel to suit particular needs is available. British Steel say that painting their finish Zincote gives a finish which is more durable than similar paint systems on mill steel and coatings are available which are as easy to paint as mild steel.

British Steel make a great Continued on next page.

### CONSULT THE SPECIALISTS

with your  
METAL FINISHING & STOVE  
ENAMELLING PROBLEMS

**INDUSTRIAL PLATING & RESEARCH CO. LTD.**

Trading Estate, Wallingford Rd.,  
Uxbridge, Middx.  
Tel: UXB 32858/34062.



## INDUSTRIAL FINISHES III

# Paint has a high protective quality

By JACK HAY

Paint is not only used to make an article pretty, it also protects.

The range of paints available to the manufacturer is large and complex, and there is quite a science in knowing which paint to apply and why. It is essential that painting should be considered as an integral part of any manufacturing process. The choice of the correct paint coating is as important as the choice of material from which the article is manufactured. Paint selection process should take place at the drawing board stage.

The constituents of paint can be freely varied to allow the paint to fulfil a particular function.

A paint chemist would probably classify a paint according to its drying properties. An engineer would think in terms of the function of the paint—decorative or protective or both?

Paint is suitable for most metals, which can be painted before or after assembly and selected areas painted without elaborate masking. With articles of complex shape it is often advisable to paint the individual parts before assembly to ensure that all surfaces are adequately coated. Alternatively the primers and undercoats may be applied before assembly and the finishing coats applied when the component is complete.

Many components and machines have to stand up to considerable strain and abrasion as part of their working life. Earth moving machinery, farm tractors, and conveyor systems all have to rely on a good protective paint covering to shield the worst of the weather from the metal underneath. This paint must be tough, flexible and specially formulated to last as long as the machine itself if need be.

### Decorative value

Protection for the metal underneath is often the foremost concern of the paint specifier, but it is not the only consideration. In many cases appearance and decoration is of equal if not prime importance, particularly in the case of cars or children's toys, where the articles must look attractive to meet their market. Even where an attractive appearance is not a requirement, the decorative value of a paint coating is very high. The appearance of an article can depend on the paint: general purpose paints are available in a wide range of colours and in a variety of gloss levels from high gloss to matt.

Novel decorative effects can be obtained by using paints containing metallic pigments such as aluminium. The best known is the metallic finish, used on so many cars. Other decorative effects include a hammered finish which gives a

beaten metal effect, and a wrinkle finish, often used on typewriters and domestic equipment.

But applying paint is not just a matter of spraying or brushing. The first steel car bodies introduced in the U.S. in 1912 were greeted with enthusiasm; but rust came through as many as 12 to 15 coats of paint. This stimulated the development of chemicals which could clean and prepare the metal surfaces in readiness for the paint finish.

Chemists and manufacturers realised that the contamination of the metal surface was caused by impurities such as grease, rust, fluxes, hand marks, dust and dirt. These are present in most factories and prevent the proper adhesion of the paint film and lead to failures in paint surfaces.

The first step in the preparation of metal for painting is the removal of grease and oil. This can be done by wiping with solvent, but has the disadvantage of high labour costs, loss of solvent and contamination of the fags.

Another method is dipping in solvent, but unless the solvent is changed regularly it soon becomes useless, re-depositing most of the contaminants.

Many of these difficulties can be overcome by the use of

trichloroethylene in specially designed plants. The metal is degreased by the condensation of trichloroethylene vapour on the cold metal surface. This is claimed to be a more efficient process, because the trichloroethylene liquid is continuously boiled up to replace the vapour that condenses.

### Alkali cleaners

The use of alkali cleaners is another way of removing grease and oil. Applied by either dip or power spray, these remove the contamination by partly saponifying and partly emulsifying the oil and grease. When dipped most of the grease separates on top of the bath and is removed by skimming over a weir. In power spray plants, cleaning is greatly helped by the physical force of jets, sometimes with a preliminary spraying stage using water only.

Rust must also be removed. Shot blasting and mechanical scrubbing can be used, but these methods often miss deposits in "valleys" and other hidden areas. Chemical rusters, based on phosphoric acid, suitably inhibited, will remove all traces of rust quickly without attacking the surrounding metal.

The most widely used pre-

treatment for iron and steel is a phosphate coating that keys the substrate for painting and prevents the spread of rust should the surface be accidentally damaged. Two types are available—zinc phosphate and iron phosphate.

Choice of process is determined by the end use of the product. Lightweight iron phosphate is ideal for use on metal furniture, radiators, light fittings, car components and articles subjected to "indoor" conditions.

A recent development has been the introduction by ICI of a non-aqueous phosphating solution. This can be applied by dip or spray gun to degreased steel. It forms a sealed phosphate coating which can be painted immediately; or the article can be put into store.

Much of the research which has been put into the preparation of steel for painting also applies to aluminium. Painting of zinc or zinc coated metal is difficult because of the reaction which occurs between the paint and the metal. This can be overcome by the use of a phosphate coating or a chromate coating.

The engineer must take into consideration a number of factors in making his paint

selection. What facilities are available for paint application? On the whole spraying is the most widely used method, because it is easily adaptable to most factory conditions; but again, the spray equipment will often influence the specifier's choice of paint. Other conditions will be the drying facilities available and the relative cost of the paint per gallon.

### Heat equipment

AEI heating division claim that the use of electric radiant heat equipment is becoming familiar in a variety of industries, particularly for the drying and stoving of paint in the metal finishing industries. The advantages put forward are a reduction in the time of processing and floor space, flexibility and adaptability.

Paint, of course, figures widely in the home as well as the factory. For wood finish many new formulations are already in their early development stages. ICI say that the future for painted plastics in furniture is most promising, particularly with the latest trend towards the painted look; this in turn may lead to several new fashion trends, in which the finishing system will play a crucial part.

## Cathodic protection widens its field

By ANDY McELROY

There is a balance in nature, dictated by the laws of chemistry, that determines that the most commonly occurring metals are only obtained in the form of their compounds. In addition, once extracted they are sufficiently reactive so that their reversion to compounds is a major problem.

Outstanding among these metals is iron, the base material of industry, and its tendency to oxidise in the presence of water, forming rust. Products of iron and mild steels are prone to rusting, and the resultant damage costs industry several hundred million pounds per year.

Of course, in theory it is possible to protect iron against rusting by covering it with an impermeable film of paint. But even when this film is truly impermeable, and is mechanically intact on first application, the rigours of industrial life almost guarantee that, within a short time, there will be enough flaws to allow the ingress of water, air and carbon dioxide to promote rusting.

Rusting is an electrochemical process, and it seems reasonable that a remedy using the same principle should be sought. This, in effect, is what cathodic protection is. In its earliest form, cathodic protection was merely a matter of coating iron with a layer of zinc, by processes known as galvanising or sheradising. In the presence of an electrolyte like water with some contaminants, the zinc dissolves more easily than the iron, and is thus preferentially corroded. Protection is afforded by the zinc even when the film is broken, and thus it is superior to paint finishes.

This is, in theory, the situation but zinc coating is not as effective in certain circumstances as the chemistry textbooks would suggest. Partly, this is due to the uncertain environments that iron and steel structures are expected to withstand and because once mechanical wear has produced a large bare patch on the iron substrate the local bimetallic couple is no longer effective.

Developments in cathodic protection have taken two distinct lines. First, greater use is being made of metals which are much more electronegative than the base material (in the case of iron, aluminium and magnesium have been found to provide better protection than zinc in many cases), and impressed current systems setting up a flow of electricity opposing that naturally generated by the two metals, have been developed.

### Metal corrosion

Each of these systems has its advantages, especially when the full range of metal corrosion is considered. In industry, it is common to find copper pipes leading directly to an iron or steel storage tank or chamber. The presence of an electrolyte, which can simply be rainwater, which has a very dilute carbonic acid, is enough to start electrolytic action leading to corrosion and subsequent failure of the joint. In both areas of protection the emphasis has been on

developing new materials for the anodes, and improving their mechanical characteristics. Among the additional materials that are now being used are, according to Dr. D. Davies, of the appropriately named Cathodic Protection Company, magnesium and aluminium, often with additions of cadmium or silicon, to replace zinc sacrificial anodes. There has also been a tendency towards increasing use of magnesium in pipeline protection, where the nature of the installation makes it economic to use a more expensive material if maintenance can be reduced.

### Current systems

Impressed current systems have been moving gradually towards better materials and increased efficiency. Diodes of silicon have superseded selenium in some applications, and although these must be protected against static discharge, the changeover is generally justified in terms of cost. One advantage with these devices, of course, is that they can be used at high temperatures, and are therefore suitable for process plant of different kinds.

Cathodic protection is applied to most major structures where metals are exposed to adverse conditions where electrolytic action is likely to take place. Although they require a power supply, the demand is low, and compared with other methods of protection the maintenance cost is small.

But there is one potential drawback which follows as a natural corollary of the system, and that is that it is as harmful to supply too large a current as it is to supply too little. Changes in temperature, surface conditions of the metals and conductivity of the electrolyte demand that the current, and therefore the potential difference, should be changed.

It is for this reason that there has been a move towards automation in recent years, where conditions are automatically monitored and the power supply regulated to match them exactly through, for example,

thyristor control systems. Automated systems of this kind are particularly applied to ships and power stations, and are being used on a modest scale in these fields.

But recently cathodic protection has moved beyond the narrowly-defined areas of metal corrosion, and has moved into the protection of metals against other forms of attack.

Deposition of dissolved salts in boiler tubes from hard water supplies can now be prevented by using an appropriate electrochemical treatment rather than the better-established ion exchange system. Despite the power supply necessary for these installations, there is little to choose, in terms of economy, between the two, while an electrolytic system is usually cheaper to install.

Anti-fouling systems depending on the electrical dispersal of metallic ions in the water around a metallic structure has also been found to be effective, and this principle has also been applied to inhibiting the growth of algae around power station outfalls.

### Now rectified

One of the most surprising aspects of cathodic protection is the way in which it has been neglected by industry for so many years. To revert to rusting iron, as far back as 1906 Chambers' Technological and Scientific Dictionary was explaining the phenomenon in terms of electrode potentials, and it would have seemed reasonable that an electrical solution would have been more eagerly sought and, when found, adopted.

Fortunately, this situation has now been rectified, and the technique is now being widely enough used to ensure that there will be even further development of anode materials and construction. In conjunction with these, growing interest in automatic control and a more exact knowledge of corrosion phenomena should continue to reduce the immense damage to industrial installations caused every year by nothing more lethal than water and fresh air.

## Coated steel — (Cont'd)

Continued from previous page. play with their product "Steelvetite". There are three forms: Steelvetite Z: PVC on one side of electro-zinc coated steel and chrome washed. Supplied in sheet or coil, and used for internal applications where high corrosion resistance is not essential. Steelvetite G: PVC on one side of hot dipped steel and chrome washed. This is essential for external applications requiring a high degree of corrosion resistance. Steelvetite R: PVC on both sides of electro-zinc coated steel.

Colour is being demanded more and more by planning authorities. In budget conscious industrial building it is the simplest way to give a building individuality and yet merge into its surroundings. The choice of colours opens out great architectural opportunities.

It has been said that plastic coated steel will require no maintenance for 15 years. British Steel say that these figures are based on extensive exposures on sites in the U.K. and overseas, and on 15,000 hours of accelerated weatherometer tests in the laboratory. The Corporation says: "After approximately 15 years in normal atmospheres there should be a continuous plastic film which will protect the galvanised base for a further period of years."

Steel, it is claimed, together with the maintenance free protection and a hot dipped galvanising is a building material of "an unrivalled combination of strength and longevity." British Steel have, obviously, an axe to grind. Yet their claims should be made with confidence. They say—"pre-finished steel pro-

vides those involved in design engineering and fabrication with the means of cutting production time and costs, eliminating workshop problems, and improving the quality of their products. In other words the means of achieving greater productivity."

The Corporation says it is able to produce virtually any finish to a sheet a manufacturer requires.

Pre-finished steel was first marketed in Britain in 1957. Industry, according to the British Steel Corporation, has proved by experience the benefits it offers. But coatings differ considerably in their surface properties, and care should be taken to choose the right one for the purpose. For that reason the British Steel Corporation suggest that the technical staff which they employ should be consulted.

## CANNING plant and solutions specified for anodising wing sections of A300B European Airbus

W. Canning & Co. Ltd., Birmingham, supplied the plant to Hawker Siddeley Aviation for anodising the wing panels of the European Airbus A300B. Here is shown a wing skin being lowered into one of the 62 ft. (18.8m) long by 12 ft. (3.6m) deep tanks.

Canning is the largest wholly British owned organisation for the manufacture and supply of plant and materials for metal finishing: plating plant, plating solutions, metal cleaners, polishing machines and materials, deburring machines, decorative and protective lacquers.

Telephone 021-236 8621 or Telex 33241

for service and product information

METAL FINISHING IS



W. CANNING & CO. LTD. BIRMINGHAM B18 6AS

## The bigger you get, the more branches you need

There are four centres in the country where you can get anything you want in the way of metal finishing processes, equipment and chemicals. In the South, the North, the Midlands and Scotland. Four centres of information. Four centres of know-how. Four centres of EfcO. All ready to spend as much time as you are in discussing your plating problems — and in coming up with the right answers to them. The EfcO advisory service on metal-finishing in general and electroplating in particular is comprehensive and free. And it's waiting for you — near enough on your own doorstep. EfcO Limited, Electro-Chemical Engineering Division, Shepperton, Uxbridge, Surrey, England

Telephone numbers

The South: Woking 5222

The North: Atherton 2181

The Midlands: 021 356 3851

Scotland: East Kilbride 29445



A MEMBER OF THE BIRLINGTON GROUP



## METAL POWER

Bestobell are power-protectors. Protectors of the strength that lies in metals and metal products.

No matter what the size, no matter what the surface... from gigantic super-tankers to small metal plates... Bestobell has the products to clean, pre-treat and cover. Products like Penetone's chemical cleaners and Hadfield's surface coatings. And if beauty or decorative qualities are needed, then there's a range of colour and special surfaces just waiting for you.

All this is backed by extensive programmes of research and development and by a technical advisory service always ready to investigate and solve individual problems.

For toughness, durability, reliability or corrosion control... for colour and decorative appeal... there's nothing to beat this unique service.

Further information and technical details are readily available. Contact John Hazel, Chemical Products Division, Bestobell Ltd., 131 Western Road, Mitcham, Surrey CR4 3YQ. Telephone: 01-648 3422.

**Hadfields | Penetone**  
Members of the Bestobell Group







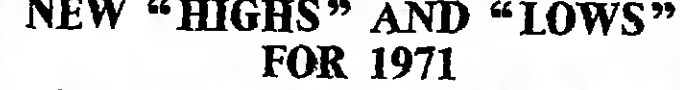








| Station or Group        | Base Date | Base Value | † Redemption yield.  |
|-------------------------|-----------|------------|--|
| Manufacturing           | 29/12/67  | 114.13     | F.T.-Actuaries indices are calculated by Exel-Communications Limited (a member of the Exchange Telegraph Group) on an IBM 360 computer.  |
| Retailing               | 29/12/67  | 114.13     | A current list of constituents of the F.T.-Actuaries Share Indices can be obtained from the Publisher, the Financial Times, Bracken House, Cannon Street, London, EC4P 4BY, price 18p. |
| Finance Brokers         | 29/12/67  | 96.67      | By post inland 16p. Commonwealth 18p. Foreign 19p.   |
| Insurance Finance       | 29/12/67  | 100.00     |  |
| Real Estate and Spirits | 16/1/70   | 144.76     |  |
| Insurance and Games     | 16/1/70   | 135.72     |  |
| Equipment               | 16/1/70   | 162.74     |  |
| Industrial Group        | 31/12/70  | 128.20     |  |
| Manufacturing Financial | 31/12/70  | 128.06     |  |
|                         | 14/4/62   | 100.00     | * Corrected.   |

[illegible]

|                           |                         |
|---------------------------|-------------------------|
| <b>NEW "HIGHS" (128)</b>  | <b>INDUSTRIALS (21)</b> |
| <b>BRITISH FUNDS (10)</b> | A.V.P. Inds.            |
|                           | Barbary Hiden.          |
|                           | Beaunifty               |
|                           | Booth Pireneah          |
|                           | Photom Intnl.           |
|                           | Sioray                  |
|                           | Spark Hides.            |
|                           | Sparr (I.W.)            |

|           |     |     |       |
|-----------|-----|-----|-------|
| als ..... | 465 | 622 | 1,768 |
|-----------|-----|-----|-------|

CORAL INDEX  
Close 413 1/2-420 1/2

**Dividend** *n.* Dividend and yield based on market price. *s.* Dividends and yield includes a dividend payment; cover does not apply to partial payment.  
**Dividend and yield.** *s.* Preference bid.  
**Abbreviations:** dx ex dividend; xx ex script issue; rx ex rights; arc ex return of capital; ax all; adx drawings; scd ex capital distribution; xps ex partial bid.



## F.T. SHARE INFORMATION SERVICE

**ENGINEERING AND METAL—Gen. Cont.**

## HOTELS AND CATERERS—Continued

[illegible][illegible]

| INTERNATIONAL BANK |                       |      |  |      |      |     |    |                |    |     |     |      |     |
|--------------------|-----------------------|------|--|------|------|-----|----|----------------|----|-----|-----|------|-----|
| 561                | ST. Louis Stock 85-84 | 94   |  | 5.79 | 8.57 | 116 | 80 | Brayton        | 56 | 215 | 2.3 | 2.0  | 2.1 |
| 562                | ST. Louis Stock 85-84 | 94   |  | 5.79 | 8.57 | 116 | 80 | Burton Spr.    | 56 | 215 | 1.7 | 1.14 | 1.4 |
| 563                | ST. Louis Stock 85-84 | 94   |  | 5.79 | 8.57 | 116 | 80 | Chas. H. H. H. | 56 | 215 | 1.7 | 1.14 | 1.4 |
| 564                | ST. Louis Stock 85-84 | 94   |  | 5.79 | 8.57 | 116 | 80 | Edgar H. H. H. | 56 | 215 | 1.4 | 1.7  | 1.4 |
| 565                | ST. Louis Stock 85-84 | 94   |  | 5.79 | 8.57 | 116 | 80 | Edgar H. H. H. | 56 | 215 | 1.4 | 1.7  | 1.4 |
| 566                | ST. Louis Stock 85-84 | 94   |  | 5.79 | 8.57 | 116 | 80 | Edgar H. H. H. | 56 | 215 | 1.4 | 1.7  | 1.4 |
| 567                | ST. Louis Stock 85-84 | 94   |  | 5.79 | 8.57 | 116 | 80 | Edgar H. H. H. | 56 | 215 | 1.4 | 1.7  | 1.4 |
| 568                | ST. Louis Stock 85-84 | 94   |  | 5.79 | 8.57 | 116 | 80 | Edgar H. H. H. | 56 | 215 | 1.4 | 1.7  | 1.4 |
| 569                | ST. Louis Stock 85-84 | 94   |  | 5.79 | 8.57 | 116 | 80 | Edgar H. H. H. | 56 | 215 | 1.4 | 1.7  | 1.4 |
| 570                | ST. Louis Stock 85-84 | 94   |  | 5.79 | 8.57 | 116 | 80 | Edgar H. H. H. | 56 | 215 | 1.4 | 1.7  | 1.4 |
| 571                | ST. Louis Stock 85-84 | 94   |  | 5.79 | 8.57 | 116 | 80 | Edgar H. H. H. | 56 | 215 | 1.4 | 1.7  | 1.4 |
| 572                | ST. Louis Stock 85-84 | 94   |  | 5.79 | 8.57 | 116 | 80 | Edgar H. H. H. | 56 | 215 | 1.4 | 1.7  | 1.4 |
| 573                | ST. Louis Stock 85-84 | 94   |  | 5.79 | 8.57 | 116 | 80 | Edgar H. H. H. | 56 | 215 | 1.4 | 1.7  | 1.4 |
| 574                | ST. Louis Stock 85-84 | 94   |  | 5.79 | 8.57 | 116 | 80 | Edgar H. H. H. | 56 | 215 | 1.4 | 1.7  | 1.4 |
| 575                | ST. Louis Stock 85-84 | 94   |  | 5.79 | 8.57 | 116 | 80 | Edgar H. H. H. | 56 | 215 | 1.4 | 1.7  | 1.4 |
| 576                | ST. Louis Stock 85-84 | 94   |  | 5.79 | 8.57 | 116 | 80 | Edgar H. H. H. | 56 | 215 | 1.4 | 1.7  | 1.4 |
| 577                | ST. Louis Stock 85-84 | 94   |  | 5.79 | 8.57 | 116 | 80 | Edgar H. H. H. | 56 | 215 | 1.4 | 1.7  | 1.4 |
| 578                | ST. Louis Stock 85-84 | 94   |  | 5.79 | 8.57 | 116 | 80 | Edgar H. H. H. | 56 | 215 | 1.4 | 1.7  | 1.4 |
| 579                | ST. Louis Stock 85-84 | 94   |  | 5.79 | 8.57 | 116 | 80 | Edgar H. H. H. | 56 | 215 | 1.4 | 1.7  | 1.4 |
| 580                | ST. Louis Stock 85-84 | 94   |  | 5.79 | 8.57 | 116 | 80 | Edgar H. H. H. | 56 | 215 | 1.4 | 1.7  | 1.4 |
| 581                | ST. Louis Stock 85-84 | 94   |  | 5.79 | 8.57 | 116 | 80 | Edgar H. H. H. | 56 | 215 | 1.4 | 1.7  | 1.4 |
| 582                | ST. Louis Stock 85-84 | 94   |  | 5.79 | 8.57 | 116 | 80 | Edgar H. H. H. | 56 | 215 | 1.4 | 1.7  | 1.4 |
| 583                | ST. Louis Stock 85-84 | 94   |  | 5.79 | 8.57 | 116 | 80 | Edgar H. H. H. | 56 | 215 | 1.4 | 1.7  | 1.4 |
| 584                | ST. Louis Stock 85-84 | 94   |  | 5.79 | 8.57 | 116 | 80 | Edgar H. H. H. | 56 | 215 | 1.4 | 1.7  | 1.4 |
| 585                | ST. Louis Stock 85-84 | 94   |  | 5.79 | 8.57 | 116 | 80 | Edgar H. H. H. | 56 | 215 | 1.4 | 1.7  | 1.4 |
| 586                | ST. Louis Stock 85-84 | 94   |  | 5.79 | 8.57 | 116 | 80 | Edgar H. H. H. | 56 | 215 | 1.4 | 1.7  | 1.4 |
| 587                | ST. Louis Stock 85-84 | 94   |  | 5.79 | 8.57 | 116 | 80 | Edgar H. H. H. | 56 | 215 | 1.4 | 1.7  | 1.4 |
| 588                | ST. Louis Stock 85-84 | 94   |  | 5.79 | 8.57 | 116 | 80 | Edgar H. H. H. | 56 | 215 | 1.4 | 1.7  | 1.4 |
| 589                | ST. Louis Stock 85-84 | 94   |  | 5.79 | 8.57 | 116 | 80 | Edgar H. H. H. | 56 | 215 | 1.4 | 1.7  | 1.4 |
| 590                | ST. Louis Stock 85-84 | 94   |  | 5.79 | 8.57 | 116 | 80 | Edgar H. H. H. | 56 | 215 | 1.4 | 1.7  | 1.4 |
| CORPORATION LOANS  |                       |      |  |      |      |     |    |                |    |     |     |      |     |
| 901a               | ST. Belmar 85-75      | 901a |  | 6.63 | 2.13 | 620 | 80 | Chas. H. H. H. | 56 | 215 | 2.3 | 2.0  | 2.1 |
| 901b               | ST. Belmar 85-75      | 901b |  | 6.63 | 2.13 | 620 | 80 | Chas. H. H. H. | 56 | 215 | 2.3 | 2.0  | 2.1 |
| 901c               | ST. Belmar 85-75      | 901c |  | 6.63 | 2.13 | 620 | 80 | Chas. H. H. H. | 56 | 215 | 2.3 | 2.0  | 2.1 |
| 901d               | ST. Belmar 85-75      | 901d |  | 6.63 | 2.13 | 620 | 80 | Chas. H. H. H. | 56 | 215 | 2.3 | 2.0  | 2.1 |
| 901e               | ST. Belmar 85-75      | 901e |  | 6.63 | 2.13 | 620 | 80 | Chas. H. H. H. | 56 | 215 | 2.3 | 2.0  | 2.1 |
| 901f               | ST. Belmar 85-75      | 901f |  | 6.63 | 2.13 | 620 | 80 | Chas. H. H. H. | 56 | 215 | 2.3 | 2.0  | 2.1 |
| 901g               | ST. Belmar 85-75      | 901g |  | 6.63 | 2.13 | 620 | 80 | Chas. H. H. H. | 56 | 215 | 2.3 | 2.0  | 2.1 |
| 901h               | ST. Belmar 85-75      | 901h |  | 6.63 | 2.13 | 620 | 80 | Chas. H. H. H. | 56 | 215 | 2.3 | 2.0  | 2.1 |
| 901i               | ST. Belmar 85-75      | 901i |  | 6.63 | 2.13 | 620 | 80 | Chas. H. H. H. | 56 | 215 | 2.3 | 2.0  | 2.1 |
| 901j               | ST. Belmar 85-75      | 901j |  | 6.63 | 2.13 | 620 | 80 | Chas. H. H. H. | 56 | 215 | 2.3 | 2.0  | 2.1 |
| 901k               | ST. Belmar 85-75      | 901k |  | 6.63 | 2.13 | 620 | 80 | Chas. H. H. H. | 56 | 215 | 2.3 | 2.0  | 2.1 |
| 901l               | ST. Belmar 85-75      | 901l |  | 6.63 | 2.13 | 620 | 80 | Chas. H. H. H. | 56 | 215 | 2.3 | 2.0  | 2.1 |
| 901m               | ST. Belmar 85-75      | 901m |  | 6.63 | 2.13 | 620 | 80 | Chas. H. H. H. | 56 | 215 | 2.3 | 2.0  | 2.1 |
| 901n               | ST. Belmar 85-75      | 901n |  | 6.63 | 2.13 | 620 | 80 | Chas. H. H. H. | 56 | 215 | 2.3 | 2.0  | 2.1 |
| 901o               | ST. Belmar 85-75      | 901o |  | 6.63 | 2.13 | 620 | 80 | Chas. H. H. H. | 56 | 215 | 2.3 | 2.0  | 2.1 |
| 901p               | ST. Belmar 85-75      | 901p |  | 6.63 | 2.13 | 620 | 80 | Chas. H. H. H. | 56 | 215 | 2.3 | 2.0  | 2.1 |
| 901q               | ST. Belmar 85-75      | 901q |  | 6.63 | 2.13 | 620 | 80 | Chas. H. H. H. | 56 | 215 | 2.3 | 2.0  | 2.1 |
| 901r               | ST. Belmar 85-75      | 901r |  | 6.63 | 2.13 | 620 | 80 | Chas. H. H. H. | 56 | 215 | 2.3 | 2.0  | 2.1 |
| 901s               | ST. Belmar 85-75      | 901s |  | 6.63 | 2.13 | 620 | 80 | Chas. H. H. H. | 56 | 215 | 2.3 | 2.0  | 2.1 |
| 901t               | ST. Belmar 85-75      | 901t |  | 6.63 | 2.13 | 620 | 80 | Chas. H. H. H. | 56 | 215 | 2.3 | 2.0  | 2.1 |
| 901u               | ST. Belmar 85-75      | 901u |  | 6.63 | 2.13 | 620 | 80 | Chas. H. H. H. | 56 | 215 | 2.3 | 2.0  | 2.1 |
| 901v               | ST. Belmar 85-75      | 901v |  | 6.63 | 2.13 | 620 | 80 | Chas. H. H. H. | 56 | 215 | 2.3 | 2.0  | 2.1 |
| 901w               | ST. Belmar 85-75      | 901w |  | 6.63 | 2.13 | 620 | 80 | Chas. H. H. H. | 56 | 215 | 2.3 | 2.0  | 2.1 |
| 901x               | ST. Belmar 85-75      | 901x |  | 6.63 | 2.13 | 620 | 80 | Chas. H. H. H. | 56 | 215 | 2.3 | 2.0  | 2.1 |
| 901y               | ST. Belmar 85-75      | 901y |  | 6.63 | 2.13 | 620 | 80 | Chas. H. H. H. | 56 | 215 | 2.3 | 2.0  | 2.1 |
| 901z               | ST. Belmar 85-75      | 901z |  | 6.63 | 2.13 | 620 | 80 | Chas. H. H. H. | 56 | 215 | 2.3 | 2.0  | 2.1 |
| 902a               | ST. Belmar 85-75      | 902a |  | 6.63 | 2.13 | 620 | 80 | Chas. H. H. H. | 56 | 215 | 2.3 | 2.0  | 2.1 |
| 902b               | ST. Belmar 85-75      | 902b |  | 6.63 | 2.13 | 620 | 80 | Chas. H. H. H. | 56 | 215 | 2.3 | 2.0  | 2.1 |
| 902c               | ST. Belmar 85-75      | 902c |  | 6.63 | 2.13 | 620 | 80 | Chas. H. H. H. | 56 | 215 | 2.3 | 2.0  | 2.1 |
| 902d               | ST. Belmar 85-75      | 902d |  | 6.63 | 2.13 | 620 | 80 | Chas. H. H. H. | 56 | 215 | 2.3 | 2.0  | 2.1 |
| 902e               | ST. Belmar 85-75      | 902e |  | 6.63 | 2.13 | 620 | 80 | Chas. H. H. H. | 56 | 215 | 2.3 | 2.0  | 2.1 |
| 902f               | ST. Belmar 85-75      | 902f |  | 6.63 | 2.13 | 620 | 80 | Chas. H. H. H. | 56 | 215 | 2.3 | 2.0  | 2.1 |
| 902g               | ST. Belmar 85-75      | 902g |  | 6.63 | 2.13 | 620 | 80 | Chas. H. H. H. | 56 | 215 | 2.3 | 2.0  | 2.1 |
| 902h               | ST. Belmar 85-75      | 902h |  | 6.63 | 2.13 | 620 | 80 | Chas. H. H. H. | 56 | 215 | 2.3 | 2.0  | 2.1 |
| 902i               | ST. Belmar 85-75      | 902i |  | 6.63 | 2.13 | 620 | 80 | Chas. H. H. H. | 56 | 215 | 2.3 | 2.0  | 2.1 |
| 902j               | ST. Belmar 85-75      | 902j |  | 6.63 | 2.13 | 620 | 80 | Chas. H. H. H. | 56 | 215 | 2.3 | 2.0  | 2.1 |
| 902k               | ST. Belmar 85-75      | 902k |  | 6.63 | 2.13 | 620 | 80 | Chas. H. H. H. | 56 | 215 | 2.3 | 2.0  | 2.1 |
| 902l               | ST. Belmar 85-75      | 902l |  | 6.63 | 2.13 | 620 | 80 | Chas. H. H. H. | 56 | 215 | 2.3 | 2.0  | 2.1 |
| 902m               | ST. Belmar 85-75      | 902m |  | 6.63 | 2.13 | 620 | 80 | Chas. H. H. H. | 56 | 215 | 2.3 | 2.0  | 2.1 |
| 902n               | ST. Belmar 85-75      | 902n |  | 6.63 | 2.13 | 620 | 80 | Chas. H. H. H. | 56 | 215 | 2.3 | 2.0  | 2.1 |
| 902o               | ST. Belmar 85-75      | 902o |  | 6.63 | 2.13 | 620 | 80 | Chas. H. H. H. | 56 | 215 | 2.3 | 2.0  | 2.1 |
| 902p               | ST. Belmar 85-75      | 902p |  | 6.63 | 2.13 | 620 | 80 | Chas. H. H. H. | 56 | 215 | 2.3 | 2.0  | 2.1 |
| 902q               | ST. Belmar 85-75      | 902q |  | 6.63 | 2.13 | 620 | 80 | Chas. H. H. H. | 56 | 215 | 2.3 | 2.0  | 2.1 |
| 902r               | ST. Belmar 85-75      | 902r |  | 6.63 | 2.13 | 620 | 80 | Chas. H. H. H. | 56 | 215 | 2.3 | 2.0  | 2.1 |
| 902s               | ST. Belmar 85-75      | 902s |  | 6.63 | 2.13 | 620 | 80 | Chas. H. H. H. | 56 | 215 | 2.3 | 2.0  | 2.1 |
| 902t               | ST. Belmar 85-75      | 902t |  | 6.63 | 2.13 | 620 | 80 | Chas. H. H. H. | 56 | 215 | 2.3 | 2.0  | 2.1 |
| 902u               | ST. Belmar 85-75      | 902u |  | 6.63 | 2.13 | 620 | 80 | Chas. H. H. H. | 56 | 215 | 2.3 | 2.0  | 2.1 |
| 902v               | ST. Belmar 85-75      | 902v |  | 6.63 | 2.13 | 620 | 80 | Chas. H. H. H. | 56 | 215 | 2.3 | 2.0  | 2.1 |
| 902w               | ST. Belmar 85-75      | 902w |  | 6.63 | 2.13 | 620 | 80 | Chas. H. H. H. | 56 | 215 | 2.3 | 2.0  | 2.1 |
| 902x               | ST. Belmar 85-75      | 902x |  | 6.63 | 2.13 | 620 | 80 | Chas. H. H. H. | 56 | 215 | 2.3 | 2.0  | 2.1 |
| 902y               | ST. Belmar 85-75      | 902y |  | 6.63 | 2.13 | 620 | 80 | Chas. H. H. H. | 56 | 215 | 2.3 | 2.0  | 2.1 |
| 902z               | ST. Belmar 85-75      | 902z |  | 6.63 | 2.13 | 620 | 80 | Chas. H. H. H. | 56 | 215 | 2.3 | 2.0  | 2.1 |
| 903a               | ST. Belmar 85-75      | 903a |  | 6.63 | 2.13 | 620 | 80 | Chas. H. H. H. | 56 | 215 | 2.3 | 2.0  | 2.1 |
| 903b               | ST. Belmar 85-75      | 903b |  | 6.63 | 2.13 | 620 | 80 | Chas. H. H. H. | 56 | 215 | 2.3 | 2.0  | 2.1 |
| 903c               | ST. Belmar 85-75      | 903c |  | 6.63 | 2.13 | 620 | 80 | Chas. H. H. H. | 56 | 215 | 2.3 | 2.0  | 2.1 |
| 903d               | ST. Belmar 85-75      | 903d |  | 6.63 | 2.13 | 620 | 80 | Chas. H. H. H. | 56 | 215 | 2.3 | 2.0  | 2.1 |
| 903e               | ST. Belmar 85-75      | 903e |  | 6.63 | 2.13 | 620 | 80 | Chas. H. H. H. | 56 | 215 | 2.3 | 2.0  | 2.1 |
| 903f               | ST. Belmar 85-75      | 903f |  | 6.63 | 2.13 | 620 | 80 | Chas. H. H. H. | 56 | 215 | 2.3 | 2.0  | 2.1 |
| 903g               | ST. Belmar 85-75      | 903g |  | 6.63 | 2.13 | 620 | 80 | Chas. H. H. H. | 56 | 215 | 2.3 | 2.0  | 2.1 |
| 903h               | ST. Belmar 85-75      | 903h |  | 6.63 | 2.13 | 620 | 80 | Chas. H. H. H. | 56 | 215 | 2.3 | 2.0  | 2.1 |
| 903i               | ST. Belmar 85-75      | 903i |  | 6.63 | 2.13 | 620 | 80 | Chas. H. H. H. | 56 | 215 | 2.3 | 2.0  | 2.1 |
| 903j               | ST. Belmar 85-75      | 903j |  | 6.63 | 2.13 | 620 | 80 | Chas. H. H. H. | 56 | 215 | 2.3 | 2.0  | 2.1 |
| 903k               | ST. Belmar 85-75      | 903k |  | 6.63 | 2.13 | 620 | 80 | Chas. H. H. H. | 56 | 215 | 2.3 | 2.0  | 2.1 |
| 903l               | ST. Belmar 85-75      | 903l |  | 6.63 | 2.13 | 620 | 80 | Chas. H. H. H. | 56 | 215 | 2.3 | 2.0  | 2.1 |
| 903m               | ST. Belmar 85-75      | 903m |  | 6.63 | 2.13 | 620 | 80 | Chas. H. H. H. | 56 | 215 | 2.3 | 2.0  | 2.1 |
| 903n               | ST. Belmar 85-75      | 903n |  | 6.63 | 2.13 | 620 | 80 | Chas. H. H. H. | 56 | 215 | 2.3 | 2.0  | 2.1 |
| 903o               | ST. Belmar 85-75      | 903o |  | 6.63 | 2.13 | 620 | 80 | Chas. H. H. H. | 56 | 215 | 2.3 | 2.0  | 2.1 |
| 903p               | ST. Belmar 85-75      | 903p |  | 6.63 | 2.13 | 620 | 80 | Chas. H. H. H. | 56 | 215 | 2.3 | 2.0  | 2.1 |
| 903q               | ST. Belmar 85-75      | 903q |  | 6.63 | 2.13 | 620 | 80 | Chas. H. H. H. | 56 | 215 | 2.3 | 2.0  | 2.1 |

[illegible][illegible]

| 1971 | Stock | Closing | + or - | Dlv. or Hous | Rec. (Mo) | 80 | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 |
|------|-------|---------|--------|--------------|-----------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
|------|-------|---------|--------|--------------|-----------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|

[illegible]

| AMERICANS |                      |    |    |
|-----------|----------------------|----|----|
| 1917      | Stock                | £  | +  |
| 1242      | 153 Amer. S. S. Inc. | 15 | 15 |
| 1243      | 144 Am. S. S. Inc.   | 15 | 15 |
| 1244      | 144 Am. S. S. Inc.   | 15 | 15 |
| 1245      | 144 Am. S. S. Inc.   | 15 | 15 |
| 1246      | 144 Am. S. S. Inc.   | 15 | 15 |
| 1247      | 144 Am. S. S. Inc.   | 15 | 15 |
| 1248      | 144 Am. S. S. Inc.   | 15 | 15 |
| 1249      | 144 Am. S. S. Inc.   | 15 | 15 |
| 1250      | 144 Am. S. S. Inc.   | 15 | 15 |
| 1251      | 144 Am. S. S. Inc.   | 15 | 15 |
| 1252      | 144 Am. S. S. Inc.   | 15 | 15 |
| 1253      | 144 Am. S. S. Inc.   | 15 | 15 |
| 1254      | 144 Am. S. S. Inc.   | 15 | 15 |
| 1255      | 144 Am. S. S. Inc.   | 15 | 15 |
| 1256      | 144 Am. S. S. Inc.   | 15 | 15 |
| 1257      | 144 Am. S. S. Inc.   | 15 | 15 |
| 1258      | 144 Am. S. S. Inc.   | 15 | 15 |
| 1259      | 144 Am. S. S. Inc.   | 15 | 15 |
| 1260      | 144 Am. S. S. Inc.   | 15 | 15 |
| 1261      | 144 Am. S. S. Inc.   | 15 | 15 |
| 1262      | 144 Am. S. S. Inc.   | 15 | 15 |
| 1263      | 144 Am. S. S. Inc.   | 15 | 15 |
| 1264      | 144 Am. S. S. Inc.   | 15 | 15 |
| 1265      | 144 Am. S. S. Inc.   | 15 | 15 |
| 1266      | 144 Am. S. S. Inc.   | 15 | 15 |
| 1267      | 144 Am. S. S. Inc.   | 15 | 15 |
| 1268      | 144 Am. S. S. Inc.   | 15 | 15 |
| 1269      | 144 Am. S. S. Inc.   | 15 | 15 |
| 1270      | 144 Am. S. S. Inc.   | 15 | 15 |
| 1271      | 144 Am. S. S. Inc.   | 15 | 15 |
| 1272      | 144 Am. S. S. Inc.   | 15 | 15 |
| 1273      | 144 Am. S. S. Inc.   | 15 | 15 |
| 1274      | 144 Am. S. S. Inc.   | 15 | 15 |
| 1275      | 144 Am. S. S. Inc.   | 15 | 15 |
| 1276      | 144 Am. S. S. Inc.   | 15 | 15 |
| 1277      | 144 Am. S. S. Inc.   | 15 | 15 |
| 1278      | 144 Am. S. S. Inc.   | 15 | 15 |
| 1279      | 144 Am. S. S. Inc.   | 15 | 15 |
| 1280      | 144 Am. S. S. Inc.   | 15 | 15 |
| 1281      | 144 Am. S. S. Inc.   | 15 | 15 |
| 1282      | 144 Am. S. S. Inc.   | 15 | 15 |
| 1283      | 144 Am. S. S. Inc.   | 15 | 15 |
| 1284      | 144 Am. S. S. Inc.   | 15 | 15 |
| 1285      | 144 Am. S. S. Inc.   | 15 | 15 |
| 1286      | 144 Am. S. S. Inc.   | 15 | 15 |
| 1287      | 144 Am. S. S. Inc.   | 15 | 15 |
| 1288      | 144 Am. S. S. Inc.   | 15 | 15 |
| 1289      | 144 Am. S. S. Inc.   | 15 | 15 |
| 1290      | 144 Am. S. S. Inc.   | 15 | 15 |
| 1291      | 144 Am. S. S. Inc.   | 15 | 15 |
| 1292      | 144 Am. S. S. Inc.   | 15 | 15 |
| 1293      | 144 Am. S. S. Inc.   | 15 | 15 |
| 1294      | 144 Am. S. S. Inc.   | 15 | 15 |
| 1295      | 144 Am. S. S. Inc.   | 15 | 15 |
| 1296      | 144 Am. S. S. Inc.   | 15 | 15 |
| 1297      | 144 Am. S. S. Inc.   | 15 | 15 |
| 1298      | 144 Am. S. S. Inc.   | 15 | 15 |
| 1299      | 144 Am. S. S. Inc.   | 15 | 15 |
| 1300      | 144 Am. S. S. Inc.   | 15 | 15 |

| BUILDING INDUSTRY—Continued |     |       |            |                |   |                 |      |                 |      | DRAPERY AND STORES—Continued |     |       |           |                |  |                 |      |                 |      |
|-----------------------------|-----|-------|------------|----------------|---|-----------------|------|-----------------|------|------------------------------|-----|-------|-----------|----------------|--|-----------------|------|-----------------|------|
|                             |     | Stock |            | Vol. and Sales |   | D. & W. Special |      | T. & W. Special |      | High                         |     | Stock |           | Vol. and Sales |  | D. & W. Special |      | T. & W. Special |      |
| High                        | Low |       |            | +              | - | +               | -    | +               | -    | +                            | -   | +     | -         |                |  | +               | -    | +               | -    |
| 201                         | 114 | 6     | Holdings   | 212            |   | 20              | 9.5  | 4.7             | 8.8  | 171                          | 38  | 63    | Permas 10 | 161            |  | 20              | 9.5  | 4.7             | 8.8  |
| 202                         | 115 | 7     | Jackson 10 | 213            |   | 21              | 10   | 4.8             | 8.9  | 172                          | 39  | 64    | Permas 11 | 162            |  | 21              | 10   | 4.8             | 8.9  |
| 203                         | 116 | 8     | James 10   | 214            |   | 22              | 10.5 | 4.9             | 9.0  | 173                          | 40  | 65    | Permas 12 | 163            |  | 22              | 10.5 | 4.9             | 9.0  |
| 204                         | 117 | 9     | Jarvis 10  | 215            |   | 23              | 11   | 5.0             | 9.1  | 174                          | 41  | 66    | Permas 13 | 164            |  | 23              | 11   | 5.0             | 9.1  |
| 205                         | 118 | 10    | Jones 10   | 216            |   | 24              | 11.5 | 5.1             | 9.2  | 175                          | 42  | 67    | Permas 14 | 165            |  | 24              | 11.5 | 5.1             | 9.2  |
| 206                         | 119 | 11    | Kelly 10   | 217            |   | 25              | 12   | 5.2             | 9.3  | 176                          | 43  | 68    | Permas 15 | 166            |  | 25              | 12   | 5.2             | 9.3  |
| 207                         | 120 | 12    | Kerr 10    | 218            |   | 26              | 12.5 | 5.3             | 9.4  | 177                          | 44  | 69    | Permas 16 | 167            |  | 26              | 12.5 | 5.3             | 9.4  |
| 208                         | 121 | 13    | Kerr 10    | 219            |   | 27              | 13   | 5.4             | 9.5  | 178                          | 45  | 70    | Permas 17 | 168            |  | 27              | 13   | 5.4             | 9.5  |
| 209                         | 122 | 14    | Kerr 10    | 220            |   | 28              | 13.5 | 5.5             | 9.6  | 179                          | 46  | 71    | Permas 18 | 169            |  | 28              | 13.5 | 5.5             | 9.6  |
| 210                         | 123 | 15    | Kerr 10    | 221            |   | 29              | 14   | 5.6             | 9.7  | 180                          | 47  | 72    | Permas 19 | 170            |  | 29              | 14   | 5.6             | 9.7  |
| 211                         | 124 | 16    | Kerr 10    | 222            |   | 30              | 14.5 | 5.7             | 9.8  | 181                          | 48  | 73    | Permas 20 | 171            |  | 30              | 14.5 | 5.7             | 9.8  |
| 212                         | 125 | 17    | Kerr 10    | 223            |   | 31              | 15   | 5.8             | 9.9  | 182                          | 49  | 74    | Permas 21 | 172            |  | 31              | 15   | 5.8             | 9.9  |
| 213                         | 126 | 18    | Kerr 10    | 224            |   | 32              | 15.5 | 5.9             | 10.0 | 183                          | 50  | 75    | Permas 22 | 173            |  | 32              | 15.5 | 5.9             | 10.0 |
| 214                         | 127 | 19    | Kerr 10    | 225            |   | 33              | 16   | 6.0             | 10.1 | 184                          | 51  | 76    | Permas 23 | 174            |  | 33              | 16   | 6.0             | 10.1 |
| 215                         | 128 | 20    | Kerr 10    | 226            |   | 34              | 16.5 | 6.1             | 10.2 | 185                          | 52  | 77    | Permas 24 | 175            |  | 34              | 16.5 | 6.1             | 10.2 |
| 216                         | 129 | 21    | Kerr 10    | 227            |   | 35              | 17   | 6.2             | 10.3 | 186                          | 53  | 78    | Permas 25 | 176            |  | 35              | 17   | 6.2             | 10.3 |
| 217                         | 130 | 22    | Kerr 10    | 228            |   | 36              | 17.5 | 6.3             | 10.4 | 187                          | 54  | 79    | Permas 26 | 177            |  | 36              | 17.5 | 6.3             | 10.4 |
| 218                         | 131 | 23    | Kerr 10    | 229            |   | 37              | 18   | 6.4             | 10.5 | 188                          | 55  | 80    | Permas 27 | 178            |  | 37              | 18   | 6.4             | 10.5 |
| 219                         | 132 | 24    | Kerr 10    | 230            |   | 38              | 18.5 | 6.5             | 10.6 | 189                          | 56  | 81    | Permas 28 | 179            |  | 38              | 18.5 | 6.5             | 10.6 |
| 220                         | 133 | 25    | Kerr 10    | 231            |   | 39              | 19   | 6.6             | 10.7 | 190                          | 57  | 82    | Permas 29 | 180            |  | 39              | 19   | 6.6             | 10.7 |
| 221                         | 134 | 26    | Kerr 10    | 232            |   | 40              | 19.5 | 6.7             | 10.8 | 191                          | 58  | 83    | Permas 30 | 181            |  | 40              | 19.5 | 6.7             | 10.8 |
| 222                         | 135 | 27    | Kerr 10    | 233            |   | 41              | 20   | 6.8             | 10.9 | 192                          | 59  | 84    | Permas 31 | 182            |  | 41              | 20   | 6.8             | 10.9 |
| 223                         | 136 | 28    | Kerr 10    | 234            |   | 42              | 20.5 | 6.9             | 11.0 | 193                          | 60  | 85    | Permas 32 | 183            |  | 42              | 20.5 | 6.9             | 11.0 |
| 224                         | 137 | 29    | Kerr 10    | 235            |   | 43              | 21   | 7.0             | 11.1 | 194                          | 61  | 86    | Permas 33 | 184            |  | 43              | 21   | 7.0             | 11.1 |
| 225                         | 138 | 30    | Kerr 10    | 236            |   | 44              | 21.5 | 7.1             | 11.2 | 195                          | 62  | 87    | Permas 34 | 185            |  | 44              | 21.5 | 7.1             | 11.2 |
| 226                         | 139 | 31    | Kerr 10    | 237            |   | 45              | 22   | 7.2             | 11.3 | 196                          | 63  | 88    | Permas 35 | 186            |  | 45              | 22   | 7.2             | 11.3 |
| 227                         | 140 | 32    | Kerr 10    | 238            |   | 46              | 22.5 | 7.3             | 11.4 | 197                          | 64  | 89    | Permas 36 | 187            |  | 46              | 22.5 | 7.3             | 11.4 |
| 228                         | 141 | 33    | Kerr 10    | 239            |   | 47              | 23   | 7.4             | 11.5 | 198                          | 65  | 90    | Permas 37 | 188            |  | 47              | 23   | 7.4             | 11.5 |
| 229                         | 142 | 34    | Kerr 10    | 240            |   | 48              | 23.5 | 7.5             | 11.6 | 199                          | 66  | 91    | Permas 38 | 189            |  | 48              | 23.5 | 7.5             | 11.6 |
| 230                         | 143 | 35    | Kerr 10    | 241            |   | 49              | 24   | 7.6             | 11.7 | 200                          | 67  | 92    | Permas 39 | 190            |  | 49              | 24   | 7.6             | 11.7 |
| 231                         | 144 | 36    | Kerr 10    | 242            |   | 50              | 24.5 | 7.7             | 11.8 | 201                          | 68  | 93    | Permas 40 | 191            |  | 50              | 24.5 | 7.7             | 11.8 |
| 232                         | 145 | 37    | Kerr 10    | 243            |   | 51              | 25   | 7.8             | 11.9 | 202                          | 69  | 94    | Permas 41 | 192            |  | 51              | 25   | 7.8             | 11.9 |
| 233                         | 146 | 38    | Kerr 10    | 244            |   | 52              | 25.5 | 7.9             | 12.0 | 203                          | 70  | 95    | Permas 42 | 193            |  | 52              | 25.5 | 7.9             | 12.0 |
| 234                         | 147 | 39    | Kerr 10    | 245            |   | 53              | 26   | 8.0             | 12.1 | 204                          | 71  | 96    | Permas 43 | 194            |  | 53              | 26   | 8.0             | 12.1 |
| 235                         | 148 | 40    | Kerr 10    | 246            |   | 54              | 26.5 | 8.1             | 12.2 | 205                          | 72  | 97    | Permas 44 | 195            |  | 54              | 26.5 | 8.1             | 12.2 |
| 236                         | 149 | 41    | Kerr 10    | 247            |   | 55              | 27   | 8.2             | 12.3 | 206                          | 73  | 98    | Permas 45 | 196            |  | 55              | 27   | 8.2             | 12.3 |
| 237                         | 150 | 42    | Kerr 10    | 248            |   | 56              | 27.5 | 8.3             | 12.4 | 207                          | 74  | 99    | Permas 46 | 197            |  | 56              | 27.5 | 8.3             | 12.4 |
| 238                         | 151 | 43    | Kerr 10    | 249            |   | 57              | 28   | 8.4             | 12.5 | 208                          | 75  | 100   | Permas 47 | 198            |  | 57              | 28   | 8.4             | 12.5 |
| 239                         | 152 | 44    | Kerr 10    | 250            |   | 58              | 28.5 | 8.5             | 12.6 | 209                          | 76  | 101   | Permas 48 | 199            |  | 58              | 28.5 | 8.5             | 12.6 |
| 240                         | 153 | 45    | Kerr 10    | 251            |   | 59              | 29   | 8.6             | 12.7 | 210                          | 77  | 102   | Permas 49 | 200            |  | 59              | 29   | 8.6             | 12.7 |
| 241                         | 154 | 46    | Kerr 10    | 252            |   | 60              | 29.5 | 8.7             | 12.8 | 211                          | 78  | 103   | Permas 50 | 201            |  | 60              | 29.5 | 8.7             | 12.8 |
| 242                         | 155 | 47    | Kerr 10    | 253            |   | 61              | 30   | 8.8             | 12.9 | 212                          | 79  | 104   | Permas 51 | 202            |  | 61              | 30   | 8.8             | 12.9 |
| 243                         | 156 | 48    | Kerr 10    | 254            |   | 62              | 30.5 | 8.9             | 13.0 | 213                          | 80  | 105   | Permas 52 | 203            |  | 62              | 30.5 | 8.9             | 13.0 |
| 244                         | 157 | 49    | Kerr 10    | 255            |   | 63              | 31   | 9.0             | 13.1 | 214                          | 81  | 106   | Permas 53 | 204            |  | 63              | 31   | 9.0             | 13.1 |
| 245                         | 158 | 50    | Kerr 10    | 256            |   | 64              | 31.5 | 9.1             | 13.2 | 215                          | 82  | 107   | Permas 54 | 205            |  | 64              | 31.5 | 9.1             | 13.2 |
| 246                         | 159 | 51    | Kerr 10    | 257            |   | 65              | 32   | 9.2             | 13.3 | 216                          | 83  | 108   | Permas 55 | 206            |  | 65              | 32   | 9.2             | 13.3 |
| 247                         | 160 | 52    | Kerr 10    | 258            |   | 66              | 32.5 | 9.3             | 13.4 | 217                          | 84  | 109   | Permas 56 | 207            |  | 66              | 32.5 | 9.3             | 13.4 |
| 248                         | 161 | 53    | Kerr 10    | 259            |   | 67              | 33   | 9.4             | 13.5 | 218                          | 85  | 110   | Permas 57 | 208            |  | 67              | 33   | 9.4             | 13.5 |
| 249                         | 162 | 54    | Kerr 10    | 260            |   | 68              | 33.5 | 9.5             | 13.6 | 219                          | 86  | 111   | Permas 58 | 209            |  | 68              | 33.5 | 9.5             | 13.6 |
| 250                         | 163 | 55    | Kerr 10    | 261            |   | 69              | 34   | 9.6             | 13.7 | 220                          | 87  | 112   | Permas 59 | 210            |  | 69              | 34   | 9.6             | 13.7 |
| 251                         | 164 | 56    | Kerr 10    | 262            |   | 70              | 34.5 | 9.7             | 13.8 | 221                          | 88  | 113   | Permas 60 | 211            |  | 70              | 34.5 | 9.7             | 13.8 |
| 252                         | 165 | 57    | Kerr 10    | 263            |   | 71              | 35   | 9.8             | 13.9 | 222                          | 89  | 114   | Permas 61 | 212            |  | 71              | 35   | 9.8             | 13.9 |
| 253                         | 166 | 58    | Kerr 10    | 264            |   | 72              | 35.5 | 9.9             | 14.0 | 223                          | 90  | 115   | Permas 62 | 213            |  | 72              | 35.5 | 9.9             | 14.0 |
| 254                         | 167 | 59    | Kerr 10    | 265            |   | 73              | 36   | 10.0            | 14.1 | 224                          | 91  | 116   | Permas 63 | 214            |  | 73              | 36   | 10.0            | 14.1 |
| 255                         | 168 | 60    | Kerr 10    | 266            |   | 74              | 36.5 | 10.1            | 14.2 | 225                          | 92  | 117   | Permas 64 | 215            |  | 74              | 36.5 | 10.1            | 14.2 |
| 256                         | 169 | 61    | Kerr 10    | 267            |   | 75              | 37   | 10.2            | 14.3 | 226                          | 93  | 118   | Permas 65 | 216            |  | 75              | 37   | 10.2            | 14.3 |
| 257                         | 170 | 62    | Kerr 10    | 268            |   | 76              | 37.5 | 10.3            | 14.4 | 227                          | 94  | 119   | Permas 66 | 217            |  | 76              | 37.5 | 10.3            | 14.4 |
| 258                         | 171 | 63    | Kerr 10    | 269            |   | 77              | 38   | 10.4            | 14.5 | 228                          | 95  | 120   | Permas 67 | 218            |  | 77              | 38   | 10.4            | 14.5 |
| 259                         | 172 | 64    | Kerr 10    | 270            |   | 78              | 38.5 | 10.5            | 14.6 | 229                          | 96  | 121   | Permas 68 | 219            |  | 78              | 38.5 | 10.5            | 14.6 |
| 260                         | 173 | 65    | Kerr 10    | 271            |   | 79              | 39   | 10.6            | 14.7 | 230                          | 97  | 122   | Permas 69 | 220            |  | 79              | 39   | 10.6            | 14.7 |
| 261                         | 174 | 66    | Kerr 10    | 272            |   | 80              | 39.5 | 10.7            | 14.8 | 231                          | 98  | 123   | Permas 70 | 221            |  | 80              | 39.5 | 10.7            | 14.8 |
| 262                         | 175 | 67    | Kerr 10    | 273            |   | 81              | 40   | 10.8            | 14.9 | 232                          | 99  | 124   | Permas 71 | 222            |  | 81              | 40   | 10.8            | 14.9 |
| 263                         | 176 | 68    | Kerr 10    | 274            |   | 82              | 40.5 | 10.9            | 15.0 | 233                          | 100 | 125   | Permas 72 | 223            |  | 82              | 40.5 | 10.9            | 15.0 |
| 264                         | 177 | 69    | Kerr 10    | 275            |   | 83              | 41   | 11.0            | 15.1 | 234                          | 101 | 126   | Permas 73 | 224            |  | 83              | 41   | 11.0            | 15.1 |
| 265                         | 178 | 70    | Kerr 10    | 276            |   | 84              | 41.5 | 11.1            | 15.2 | 235                          | 102 | 127   | Permas 74 | 225            |  | 84              | 41.5 | 11.1            | 15.2 |
| 266                         | 179 | 71    | Kerr 10    | 277            |   | 85              | 42   | 11.2            | 15.3 | 236                          | 103 | 128   | Permas 75 | 226            |  | 85              | 42   | 11.2            | 15.3 |
| 267                         | 180 | 72    | Kerr 10    | 278            |   | 86              | 42.5 | 11.3            | 15.4 | 237                          | 104 | 129   | Permas 76 | 227            |  | 86              | 42.5 | 11.3            | 15.4 |
| 268                         | 181 | 73    | Kerr 10    | 279            |   | 87              | 43   | 11.4            | 15.5 | 238                          | 105 | 130   | Permas 77 | 228            |  | 87              | 43   | 11.4            | 15.5 |
| 269                         | 182 | 74    | Kerr 10    | 280            |   | 88              | 43.5 | 11.5            | 15.6 | 239                          | 106 | 131   | Permas 78 | 229            |  | 88              | 43.5 | 11.5            | 15.6 |
| 270                         | 183 | 75    | Kerr 10    | 281            |   | 89              | 44   | 11.6            | 15.7 | 240                          | 107 | 132   | Permas 79 | 230            |  | 89              | 44   | 11.6            | 15.7 |
| 271                         | 184 | 76    | Kerr 10    | 282            |   | 90              | 44.5 | 11.7            | 15.8 | 241                          | 108 | 133   | Permas 80 | 231            |  | 90              | 44.5 | 11.7            | 15.8 |
| 272                         | 185 | 77    | Kerr 10    | 283            |   | 91              | 45   | 11.8            | 15.9 | 242                          | 109 | 134   | Permas 81 | 232            |  | 91              | 45   | 11.8            | 15.9 |
| 273                         | 186 | 78    | Kerr 10    | 284            |   | 92              | 45.5 | 11.9            | 16.0 | 243                          | 110 | 135   | Permas 82 | 233            |  | 92              | 45.5 | 11.9            | 16.0 |
| 274                         | 187 | 79    | Kerr 10    | 285            |   | 93              | 46   | 12.0            | 16.1 | 244                          | 111 | 136   | Permas 83 | 234            |  | 93              | 46   | 12.0            | 16.1 |
| 275                         | 188 | 80    | Kerr 10    | 286            |   | 94              | 46.5 | 12.1            | 16.2 | 245                          | 112 | 137   | Permas 84 | 235            |  | 94              | 46.5 | 12.1            | 16.2 |
| 276                         | 189 | 81    | Kerr 10    | 287            |   | 95              | 47   | 12.2            | 16.3 | 246                          | 113 | 138   | Permas 85 | 236            |  | 95              | 47   | 12.2            | 16.3 |
| 277                         | 190 | 82    | Kerr 10    | 288            |   | 96              | 47.5 | 12.3            | 16.4 | 247                          | 114 | 139   | Permas 86 | 237            |  | 96              | 47.5 | 12.3            | 16.4 |
| 278                         | 191 | 83    | Kerr       |                |   |                 |      |                 |      |                              |     |       |           |                |  |                 |      |                 |      |

[illegible]

| CHEMICALS, PLASTICS, ETC. |      |                    |         |     |      |         |     |         |                     |                 |    |     |          |          |
|---------------------------|------|--------------------|---------|-----|------|---------|-----|---------|---------------------|-----------------|----|-----|----------|----------|
| 54                        | 91   | Alberici Wilsa     | 271 1/2 | 9   | 12.2 | 1,923.0 | 131 | 67      | Presme Inc.         | 152 1/2         | 1  | N36 | 1.6      | 6,621.13 |
| 1564                      | 1154 | Allied Colloid Lbr | 128     | 426 | 5.1  | 4,917.0 | 108 | 64      | Ray E. H. Orls      | 150             | 1  | 11  | 1.8      | 2,354.1  |
| 361                       | 82   | Anacoe Chem        | 76      | 14  | 0.9  | 1,973.0 | 198 | 78      | Reidman             | 70              | 10 | 164 | 1.0      | 4,125.66 |
| 37                        | 23   | Lang Am. W. P.     | 43      | 17  | 1.5  | 3,513.0 | 590 | 336     | Reynolds (A.I.)     | 75              | 15 | 164 | 1.2      | 1,64.2   |
| 31                        | 23   | Lang Am. W. P.     | 43      | 17  | 1.5  | 3,513.0 | 590 | 336     | Robt. H. Orls       | 95              | 1  | 164 | 1.4      | 9,265.25 |
| 94                        | 61   | Al. W. P.          | 54      | 13  | 1.9  | 3,314.9 | 198 | 78      | Robt. H. Orls       | 95              | 1  | 164 | 1.1      | 1,712.12 |
| 44                        | 18   | Lang Am. W. P.     | 44 1/2  | 13  | 2.5  | 5,040.1 | 141 | 11      | S. H. Orls          | 114             | 18 | 1.9 | 7.0      | 8,000.0  |
| 42                        | 30   | Brit. Tr. P. 2     | 32 1/2  | 10  | 2.3  | 3,573.4 | 270 | 198     | Schles (G. R.)      | 97              | 7  | 6   | 5.8      | 6.0      |
| 67                        | 25   | Woodsley H. P.     | 62 1/2  | 25  | 3.1  | 4,411.2 | 141 | 8       | St. John's Auto Lbr | 124 1/2         | 10 | 1.2 | 6,017.0  | 7.0      |
| 10                        | 6    | Burrell S. C.      | 10 1/2  | 13  | 1.7  | 5.8     | 8.7 | 562     | 300                 | S. C. (V. C.)   | 32 | 8   | 3.4      | 3,929.4  |
| 10                        | 6    | Burrell S. C.      | 10 1/2  | 13  | 1.7  | 5.8     | 8.7 | 562     | 300                 | S. C. (V. C.)   | 32 | 8   | 3.4      | 3,929.4  |
| 326                       | 290  | Gina G. P. 12      | 282 1/2 | 22  | 2.0  | 6.1     | 8.2 | 217 1/2 | 21                  | Somd. Dis. P. 2 | 21 | 2   | 26,670.1 | 6.2      |
| 326                       | 290  | Gina G. P. 12      | 282 1/2 | 7   | 2.4  | 5.5     | 8.2 | 217 1/2 | 21                  | Somd. Dis. P. 2 | 21 | 2   | 26,670.1 | 6.2      |
| 34                        | 96   | Cosilite Chem Co.  | 86 1/2  | 15  | 5.3  | 1,817.7 | 250 | 227     | Telfer, Inc.        | 335 1/2         | 1  | 14  | 2,627.5  | 2.5      |
| 574                       | 36   | Cosilite Chem Co.  | 86 1/2  | 15  | 5.3  | 1,817.7 | 250 | 227     | Telfer, Inc.        | 335 1/2         | 1  | 14  | 2,627.5  | 2.5      |
| 574                       | 36   | Cosilite Chem Co.  | 86 1/2  | 15  | 5.3  | 1,817.7 | 250 | 227     | Telfer, Inc.        | 335 1/2         | 1  | 14  | 2,627.5  | 2.5      |
| 22                        | 11   | Cosilite Chem Co.  | 16 1/2  | 7   | 3.0  | 2,250.0 | 35  | 38      | Tr. P. 2            | 61 1/2          | 10 | 2.0 | 6.7      | 7.4      |
| 73                        | 43   | Cosilite Chem Co.  | 73      | 23  | 4.8  | 1,771.6 | 39  | 38      | Ultra Electronic    | 63              | 1  | 10  | 8.2      | 5,511.0  |
| 29                        | 29   | Cosilite Chem Co.  | 29      | 29  | 2.0  | 2,250.0 | 35  | 38      | Ultra Electronic    | 63              | 1  | 10  | 8.2      | 5,511.0  |
| 200                       | 100  | Fordach            | 198     | 420 | 1.6  | 2,250.0 | 35  | 38      | Ultra Electronic    | 63              | 1  | 10  | 8.2      | 5,511.0  |
| 125                       | 105  | Glavin (Chem.)     | 105     | 412 | 1.9  | 4,411.2 | 141 | 11      | West. Al. Sci.      | 70              | 1  | 10  | 8.2      | 5,511.0  |
| 125                       | 105  | Glavin (Chem.)     | 105     | 412 | 1.9  | 4,411.2 | 141 | 11      | West. Al. Sci.      | 70              | 1  | 10  | 8.2      | 5,511.0  |
| 276                       | 276  | Glavin (Chem.)     | 276     | 276 | 2.1  | 1,252.7 | 107 | 46 1/2  | West. Al. Sci.      | 43              | 13 | 1.0 | 7,012.9  | 1.9      |
| 276                       | 276  | Glavin (Chem.)     | 276     | 276 | 2.1  | 1,252.7 | 107 | 46 1/2  | West. Al. Sci.      | 43              | 13 | 1.0 | 7,012.9  | 1.9      |
| 276                       | 276  | Glavin (Chem.)     | 276     | 276 | 2.1  | 1,252.7 | 107 | 46 1/2  | West. Al. Sci.      | 43              | 13 | 1.0 | 7,012.9  | 1.9      |
| 276                       | 276  | Glavin (Chem.)     | 276     | 276 | 2.1  | 1,252.7 | 107 | 46 1/2  | West. Al. Sci.      | 43              | 13 | 1.0 | 7,012.9  | 1.9      |
| 276                       | 276  | Glavin (Chem.)     | 276     | 276 | 2.1  | 1,252.7 | 107 | 46 1/2  | West. Al. Sci.      | 43              | 13 | 1.0 | 7,012.9  | 1.9      |
| 276                       | 276  | Glavin (Chem.)     | 276     | 276 | 2.1  | 1,252.7 | 107 | 46 1/2  | West. Al. Sci.      | 43              | 13 | 1.0 | 7,012.9  | 1.9      |
| 276                       | 276  | Glavin (Chem.)     | 276     | 276 | 2.1  | 1,252.7 | 107 | 46 1/2  | West. Al. Sci.      | 43              | 13 | 1.0 | 7,012.9  | 1.9      |
| 276                       | 276  | Glavin (Chem.)     | 276     | 276 | 2.1  | 1,252.7 | 107 | 46 1/2  | West. Al. Sci.      | 43              | 13 | 1.0 | 7,012.9  | 1.9      |
| 276                       | 276  | Glavin (Chem.)     | 276     | 276 | 2.1  | 1,252.7 | 107 | 46 1/2  | West. Al. Sci.      | 43              | 13 | 1.0 | 7,012.9  | 1.9      |
| 276                       | 276  | Glavin (Chem.)     | 276     | 276 | 2.1  | 1,252.7 | 107 | 46 1/2  | West. Al. Sci.      | 43              | 13 | 1.0 | 7,012.9  | 1.9      |
| 276                       | 276  | Glavin (Chem.)     | 276     | 276 | 2.1  | 1,252.7 | 107 | 46 1/2  | West. Al. Sci.      | 43              | 13 | 1.0 | 7,012.9  | 1.9      |
| 276                       | 276  | Glavin (Chem.)     | 276     | 276 | 2.1  | 1,252.7 | 107 | 46 1/2  | West. Al. Sci.      | 43              | 13 | 1.0 | 7,012.9  | 1.9      |
| 276                       | 276  | Glavin (Chem.)     | 276     | 276 | 2.1  | 1,252.7 | 107 | 46 1/2  | West. Al. Sci.      | 43              | 13 | 1.0 | 7,012.9  | 1.9      |
| 276                       | 276  | Glavin (Chem.)     | 276     | 276 | 2.1  | 1,252.7 | 107 | 46 1/2  | West. Al. Sci.      | 43              | 13 | 1.0 | 7,012.9  | 1.9      |
| 276                       | 276  | Glavin (Chem.)     | 276     | 276 | 2.1  | 1,252.7 | 107 | 46 1/2  | West. Al. Sci.      | 43              | 13 | 1.0 | 7,012.9  | 1.9      |
| 276                       | 276  | Glavin (Chem.)     | 276     | 276 | 2.1  | 1,252.7 | 107 | 46 1/2  | West. Al. Sci.      | 43              | 13 | 1.0 | 7,012.9  | 1.9      |
| 276                       | 276  | Glavin (Chem.)     | 276     | 276 | 2.1  | 1,252.7 | 107 | 46 1/2  | West. Al. Sci.      | 43              | 13 | 1.0 | 7,012.9  | 1.9      |
| 276                       | 276  | Glavin (Chem.)     | 276     | 276 | 2.1  | 1,252.7 | 107 | 46 1/2  | West. Al. Sci.      | 43              | 13 | 1.0 | 7,012.9  | 1.9      |
| 276                       | 276  | Glavin (Chem.)     | 276     | 276 | 2.1  | 1,252.7 | 107 | 46 1/2  | West. Al. Sci.      | 43              | 13 | 1.0 | 7,012.9  | 1.9      |
| 276                       | 276  | Glavin (Chem.)     | 276     | 276 | 2.1  | 1,252.7 | 107 | 46 1/2  | West. Al. Sci.      | 43              | 13 | 1.0 | 7,012.9  | 1.9      |
| 276                       | 276  | Glavin (Chem.)     | 276     | 276 | 2.1  | 1,252.7 | 107 | 46 1/2  | West. Al. Sci.      | 43              | 13 | 1.0 | 7,012.9  | 1.9      |
| 276                       | 276  | Glavin (Chem.)     | 276     | 276 | 2.1  | 1,252.7 | 107 | 46 1/2  | West. Al. Sci.      | 43              | 13 | 1.0 | 7,012.9  | 1.9      |
| 276                       | 276  | Glavin (Chem.)     | 276     | 276 | 2.1  | 1,252.7 | 107 | 46 1/2  | West. Al. Sci.      | 43              | 13 | 1.0 | 7,012.9  | 1.9      |
| 276                       | 276  | Glavin (Chem.)     | 276     | 276 | 2.1  | 1,252.7 | 107 | 46 1/2  | West. Al. Sci.      | 43              | 13 | 1.0 | 7,012.9  | 1.9      |
| 276                       | 276  | Glavin (Chem.)     | 276     | 276 | 2.1  | 1,252.7 | 107 | 46 1/2  | West. Al. Sci.      | 43              | 13 | 1.0 | 7,012.9  | 1.9      |
| 276                       | 276  | Glavin (Chem.)     | 276     | 276 | 2.1  | 1,252.7 | 107 | 46 1/2  | West. Al. Sci.      | 43              | 13 | 1.0 | 7,012.9  | 1.9      |
| 276                       | 276  | Glavin (Chem.)     | 276     | 276 | 2.1  | 1,252.7 | 107 | 46 1/2  | West. Al. Sci.      | 43              | 13 | 1.0 | 7,012.9  | 1.9      |
| 276                       | 276  | Glavin (Chem.)     | 276     | 276 | 2.1  | 1,252.7 | 107 | 46 1/2  | West. Al. Sci.      | 43              | 13 | 1.0 | 7,012.9  | 1.9      |
| 276                       | 276  | Glavin (Chem.)     | 276     | 276 | 2.1  | 1,252.7 | 107 | 46 1/2  | West. Al. Sci.      | 43              | 13 | 1.0 | 7,012.9  | 1.9      |
| 276                       | 276  | Glavin (Chem.)     | 276     | 276 | 2.1  | 1,252.7 | 107 | 46 1/2  | West. Al. Sci.      | 43              | 13 | 1.0 | 7,012.9  | 1.9      |
| 276                       | 276  | Glavin (Chem.)     | 276     | 276 | 2.1  | 1,252.7 | 107 | 46 1/2  | West. Al. Sci.      | 43              | 13 | 1.0 | 7,012.9  | 1.9      |
| 276                       | 276  | Glavin (Chem.)     | 276     | 276 | 2.1  | 1,252.7 | 107 | 46 1/2  | West. Al. Sci.      | 43              | 13 | 1.0 | 7,012.9  | 1.9      |
| 276                       | 276  | Glavin (Chem.)     | 276     | 276 | 2.1  | 1,252.7 | 107 | 46 1/2  | West. Al. Sci.      | 43              | 13 | 1.0 | 7,012.9  | 1.9      |
| 276                       | 276  | Glavin (Chem.)     | 276     | 276 | 2.1  | 1,252.7 | 107 | 46 1/2  | West. Al. Sci.      | 43              | 13 | 1.0 | 7,012.9  | 1.9      |
| 276                       | 276  | Glavin (Chem.)     | 276     | 276 | 2.1  | 1,252.7 | 107 | 46 1/2  | West.               |                 |    |     |          |          |

|    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |      |
|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 | 101 | 102 | 103 | 104 | 105 | 106 | 107 | 108 | 109 | 110 | 111 | 112 | 113 | 114 | 115 | 116 | 117 | 118 | 119 | 120 | 121 | 122 | 123 | 124 | 125 | 126 | 127 | 128 | 129 | 130 | 131 | 132 | 133 | 134 | 135 | 136 | 137 | 138 | 139 | 140 | 141 | 142 | 143 | 144 | 145 | 146 | 147 | 148 | 149 | 150 | 151 | 152 | 153 | 154 | 155 | 156 | 157 | 158 | 159 | 160 | 161 | 162 | 163 | 164 | 165 | 166 | 167 | 168 | 169 | 170 | 171 | 172 | 173 | 174 | 175 | 176 | 177 | 178 | 179 | 180 | 181 | 182 | 183 | 184 | 185 | 186 | 187 | 188 | 189 | 190 | 191 | 192 | 193 | 194 | 195 | 196 | 197 | 198 | 199 | 200 | 201 | 202 | 203 | 204 | 205 | 206 | 207 | 208 | 209 | 210 | 211 | 212 | 213 | 214 | 215 | 216 | 217 | 218 | 219 | 220 | 221 | 222 | 223 | 224 | 225 | 226 | 227 | 228 | 229 | 230 | 231 | 232 | 233 | 234 | 235 | 236 | 237 | 238 | 239 | 240 | 241 | 242 | 243 | 244 | 245 | 246 | 247 | 248 | 249 | 250 | 251 | 252 | 253 | 254 | 255 | 256 | 257 | 258 | 259 | 260 | 261 | 262 | 263 | 264 | 265 | 266 | 267 | 268 | 269 | 270 | 271 | 272 | 273 | 274 | 275 | 276 | 277 | 278 | 279 | 280 | 281 | 282 | 283 | 284 | 285 | 286 | 287 | 288 | 289 | 290 | 291 | 292 | 293 | 294 | 295 | 296 | 297 | 298 | 299 | 300 | 301 | 302 | 303 | 304 | 305 | 306 | 307 | 308 | 309 | 310 | 311 | 312 | 313 | 314 | 315 | 316 | 317 | 318 | 319 | 320 | 321 | 322 | 323 | 324 | 325 | 326 | 327 | 328 | 329 | 330 | 331 | 332 | 333 | 334 | 335 | 336 | 337 | 338 | 339 | 340 | 341 | 342 | 343 | 344 | 345 | 346 | 347 | 348 | 349 | 350 | 351 | 352 | 353 | 354 | 355 | 356 | 357 | 358 | 359 | 360 | 361 | 362 | 363 | 364 | 365 | 366 | 367 | 368 | 369 | 370 | 371 | 372 | 373 | 374 | 375 | 376 | 377 | 378 | 379 | 380 | 381 | 382 | 383 | 384 | 385 | 386 | 387 | 388 | 389 | 390 | 391 | 392 | 393 | 394 | 395 | 396 | 397 | 398 | 399 | 400 | 401 | 402 | 403 | 404 | 405 | 406 | 407 | 408 | 409 | 410 | 411 | 412 | 413 | 414 | 415 | 416 | 417 | 418 | 419 | 420 | 421 | 422 | 423 | 424 | 425 | 426 | 427 | 428 | 429 | 430 | 431 | 432 | 433 | 434 | 435 | 436 | 437 | 438 | 439 | 440 | 441 | 442 | 443 | 444 | 445 | 446 | 447 | 448 | 449 | 450 | 451 | 452 | 453 | 454 | 455 | 456 | 457 | 458 | 459 | 460 | 461 | 462 | 463 | 464 | 465 | 466 | 467 | 468 | 469 | 470 | 471 | 472 | 473 | 474 | 475 | 476 | 477 | 478 | 479 | 480 | 481 | 482 | 483 | 484 | 485 | 486 | 487 | 488 | 489 | 490 | 491 | 492 | 493 | 494 | 495 | 496 | 497 | 498 | 499 | 500 | 501 | 502 | 503 | 504 | 505 | 506 | 507 | 508 | 509 | 510 | 511 | 512 | 513 | 514 | 515 | 516 | 517 | 518 | 519 | 520 | 521 | 522 | 523 | 524 | 525 | 526 | 527 | 528 | 529 | 530 | 531 | 532 | 533 | 534 | 535 | 536 | 537 | 538 | 539 | 540 | 541 | 542 | 543 | 544 | 545 | 546 | 547 | 548 | 549 | 550 | 551 | 552 | 553 | 554 | 555 | 556 | 557 | 558 | 559 | 560 | 561 | 562 | 563 | 564 | 565 | 566 | 567 | 568 | 569 | 570 | 571 | 572 | 573 | 574 | 575 | 576 | 577 | 578 | 579 | 580 | 581 | 582 | 583 | 584 | 585 | 586 | 587 | 588 | 589 | 590 | 591 | 592 | 593 | 594 | 595 | 596 | 597 | 598 | 599 | 600 | 601 | 602 | 603 | 604 | 605 | 606 | 607 | 608 | 609 | 610 | 611 | 612 | 613 | 614 | 615 | 616 | 617 | 618 | 619 | 620 | 621 | 622 | 623 | 624 | 625 | 626 | 627 | 628 | 629 | 630 | 631 | 632 | 633 | 634 | 635 | 636 | 637 | 638 | 639 | 640 | 641 | 642 | 643 | 644 | 645 | 646 | 647 | 648 | 649 | 650 | 651 | 652 | 653 | 654 | 655 | 656 | 657 | 658 | 659 | 660 | 661 | 662 | 663 | 664 | 665 | 666 | 667 | 668 | 669 | 670 | 671 | 672 | 673 | 674 | 675 | 676 | 677 | 678 | 679 | 680 | 681 | 682 | 683 | 684 | 685 | 686 | 687 | 688 | 689 | 690 | 691 | 692 | 693 | 694 | 695 | 696 | 697 | 698 | 699 | 700 | 701 | 702 | 703 | 704 | 705 | 706 | 707 | 708 | 709 | 710 | 711 | 712 | 713 | 714 | 715 | 716 | 717 | 718 | 719 | 720 | 721 | 722 | 723 | 724 | 725 | 726 | 727 | 728 | 729 | 730 | 731 | 732 | 733 | 734 | 735 | 736 | 737 | 738 | 739 | 740 | 741 | 742 | 743 | 744 | 745 | 746 | 747 | 748 | 749 | 750 | 751 | 752 | 753 | 754 | 755 | 756 | 757 | 758 | 759 | 760 | 761 | 762 | 763 | 764 | 765 | 766 | 767 | 768 | 769 | 770 | 771 | 772 | 773 | 774 | 775 | 776 | 777 | 778 | 779 | 780 | 781 | 782 | 783 | 784 | 785 | 786 | 787 | 788 | 789 | 790 | 791 | 792 | 793 | 794 | 795 | 796 | 797 | 798 | 799 | 800 | 801 | 802 | 803 | 804 | 805 | 806 | 807 | 808 | 809 | 810 | 811 | 812 | 813 | 814 | 815 | 816 | 817 | 818 | 819 | 820 | 821 | 822 | 823 | 824 | 825 | 826 | 827 | 828 | 829 | 830 | 831 | 832 | 833 | 834 | 835 | 836 | 837 | 838 | 839 | 840 | 841 | 842 | 843 | 844 | 845 | 846 | 847 | 848 | 849 | 850 | 851 | 852 | 853 | 854 | 855 | 856 | 857 | 858 | 859 | 860 | 861 | 862 | 863 | 864 | 865 | 866 | 867 | 868 | 869 | 870 | 871 | 872 | 873 | 874 | 875 | 876 | 877 | 878 | 879 | 880 | 881 | 882 | 883 | 884 | 885 | 886 | 887 | 888 | 889 | 890 | 891 | 892 | 893 | 894 | 895 | 896 | 897 | 898 | 899 | 900 | 901 | 902 | 903 | 904 | 905 | 906 | 907 | 908 | 909 | 910 | 911 | 912 | 913 | 914 | 915 | 916 | 917 | 918 | 919 | 920 | 921 | 922 | 923 | 924 | 925 | 926 | 927 | 928 | 929 | 930 | 931 | 932 | 933 | 934 | 935 | 936 | 937 | 938 | 939 | 940 | 941 | 942 | 943 | 944 | 945 | 946 | 947 | 948 | 949 | 950 | 951 | 952 | 953 | 954 | 955 | 956 | 957 | 958 | 959 | 960 | 961 | 962 | 963 | 964 | 965 | 966 | 967 | 968 | 969 | 970 | 971 | 972 | 973 | 974 | 975 | 976 | 977 | 978 | 979 | 980 | 981 | 982 | 983 | 984 | 985 | 986 | 987 | 988 | 989 | 990 | 991 | 992 | 993 | 994 | 995 | 996 | 997 | 998 | 999 | 1000 |
| 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 | 101 | 102 | 103 | 104 | 105 | 106 | 107 | 108 | 109 | 110 | 111 | 112 | 113 | 114 | 115 | 116 | 117 | 118 | 119 | 120 | 121 | 122 | 123 | 124 | 125 | 126 | 127 | 128 | 129 | 130 | 131 | 132 | 133 | 134 | 135 | 136 | 137 | 138 | 139 | 140 | 141 | 142 | 143 | 144 | 145 | 146 | 147 | 148 | 149 | 150 | 151 | 152 | 153 | 154 | 155 | 156 | 157 | 158 | 159 | 160 | 161 | 162 | 163 | 164 | 165 | 166 | 167 | 168 | 169 | 170 | 171 | 172 | 173 | 174 | 175 | 176 | 177 | 178 | 179 | 180 | 181 | 182 | 183 | 184 | 185 | 186 | 187 | 188 | 189 | 190 | 191 | 192 | 193 | 194 | 195 | 196 | 197 | 198 | 199 | 200 | 201 | 202 | 203 | 204 | 205 | 206 | 207 | 208 | 209 | 210 | 211 | 212 | 213 | 214 | 215 | 216 | 217 | 218 | 219 | 220 | 221 | 222 | 223 | 224 | 225 | 226 | 227 | 228 | 229 | 230 | 231 | 232 | 233 | 234 | 235 | 236 | 237 | 238 | 239 | 240 | 241 | 242 | 243 | 244 | 245 | 246 | 247 | 248 | 249 | 250 | 251 | 252 | 253 | 254 | 255 | 256 | 257 | 258 | 259 | 260 | 261 | 262 | 263 | 264 | 265 | 266 | 267 | 268 | 269 | 270 | 271 | 272 | 273 | 274 | 275 | 276 | 277 | 278 | 279 | 280 | 281 | 282 | 283 | 284 | 285 | 286 | 287 | 288 | 289 | 290 | 291 | 292 | 293 | 294 | 295 | 296 | 297 | 298 | 299 | 300 | 301 | 302 | 303 | 304 | 305 | 306 | 307 | 308 | 309 | 310 | 311 | 312 | 313 | 314 | 315 | 316 | 317 | 318 | 319 | 320 | 321 | 322 | 323 | 324 | 325 | 326 | 327 | 328 | 329 | 330 | 331 | 332 | 333 | 334 | 335 | 336 | 337 | 338 | 339 | 340 | 341 | 342 | 343 | 344 | 345 | 346 | 347 | 348 | 349 | 350 | 351 | 352 | 353 | 354 | 355 | 356 | 357 | 358 | 359 | 360 | 361 | 362 | 363 | 364 | 365 | 366 | 367 | 368 | 369 | 370 | 371 | 372 | 373 | 374 | 375 | 376 | 377 | 378 | 379 | 380 | 381 | 382 | 383 | 384 | 385 | 386 | 387 | 388 | 389 | 390 | 391 | 392 | 393 | 394 | 395 | 396 | 397 | 398 | 399 | 400 | 401 | 402 | 403 | 404 | 405 | 406 | 407 | 408 | 409 | 410 | 411 | 412 | 413 | 414 | 415 | 416 | 417 | 418 | 419 | 420 | 421 | 422 | 423 | 424 | 425 | 426 | 427 | 428 | 429 | 430 | 431 | 432 | 433 | 434 | 435 | 436 | 437 | 438 | 439 | 440 | 441 | 442 | 443 | 444 | 445 | 446 | 447 | 448 | 449 | 450 | 451 | 452 | 453 | 454 | 455 | 456 | 457 | 458 | 459 | 460 | 461 | 462 | 463 | 464 | 465 | 466 | 467 | 468 | 469 | 470 | 471 | 472 | 473 | 474 | 475 | 476 | 477 | 478 | 479 | 480 | 481 | 482 | 483 | 484 | 485 | 486 | 487 | 488 | 489 | 490 | 491 | 492 | 493 | 494 | 495 | 496 | 497 | 498 | 499 | 500 | 501 | 502 | 503 | 504 | 505 | 506 | 507 | 508 | 509 | 510 | 511 | 512 | 513 | 514 | 515 | 516 | 517 | 518 | 519 | 520 | 521 | 522 | 523 | 524 | 525 | 526 | 527 | 528 | 529 | 530 | 531 | 532 | 533 | 534 | 535 | 536 | 537 | 538 | 539 | 540 | 541 | 542 | 543 | 544 | 545 | 546 | 547 | 548 | 549 | 550 | 551 | 552 | 553 | 554 | 555 | 556 | 557 | 558 | 559 | 560 | 561 | 562 | 563 | 564 | 565 | 566 | 567 | 568 | 569 | 570 | 571 | 572 | 573 | 574 | 575 | 576 | 577 | 578 | 579 | 580 | 581 | 582 | 583 | 584 | 585 | 586 | 587 | 588 | 589 | 590 | 591 | 592 | 593 | 594 | 595 | 596 | 597 | 598 | 599 | 600 | 601 | 602 | 603 | 604 | 605 | 606 | 607 | 608 | 609 | 610 | 611 | 612 | 613 | 614 | 615 | 616 | 617 | 618 | 619 | 620 | 621 | 622 | 623 | 624 | 625 | 626 | 627 | 628 | 629 | 630 | 631 | 632 | 633 | 634 | 635 | 636 | 637 | 638 | 639 | 640 | 641 | 642 | 643 | 644 | 645 | 646 | 647 | 648 | 649 | 650 | 651 | 652 | 653 | 654 | 655 | 656 | 657 | 658 | 659 | 660 | 661 | 662 | 663 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |      |

| DRAFTERY |                        |     |    | AND STORES |     |      |     |     |                      |     |    |     |     |      |     |
|----------|------------------------|-----|----|------------|-----|------|-----|-----|----------------------|-----|----|-----|-----|------|-----|
| 68       | 1171 Alberte Store 100 | 66  | ++ | 10         | 1.5 | 1.04 | 6.3 | 76  | 31 Barrio & Sons     | 67  | 13 | 10  | 5.0 | 8.0  | 8.7 |
| 69       | 1172 Aqueduct unit 150 | 67  | ++ | 23         | 1.5 | 4.47 | 1.1 | 77  | 82nd Barrio W. Shop  | 68  | 13 | 28  | 8.0 | 6.0  | 7.3 |
| 70       | 1173 B. & S. 100       | 68  | ++ | 12         | 1.5 | 1.04 | 6.3 | 78  | 83rd Barrio W. Shop  | 69  | 13 | 28  | 8.0 | 6.0  | 7.3 |
| 71       | 1174 Army & Navy 200   | 69  | ++ | 12         | 1.5 | 1.04 | 6.3 | 79  | 84th Barrio W. Shop  | 70  | 13 | 420 | 0   | 16.0 | 0   |
| 72       | 1175 Baker's 100       | 70  | ++ | 12         | 2.0 | 4.7  | 8.0 | 80  | 85th Barrio W. Shop  | 71  | 13 | 420 | 0.4 | 4.9  | 8.6 |
| 73       | 1176 Baker's 100       | 71  | ++ | 12         | 2.0 | 4.7  | 8.0 | 81  | 86th Barrio W. Shop  | 72  | 13 | 420 | 1.0 | 2.0  | 3.0 |
| 74       | 1177 Baker's 100       | 72  | ++ | 11.5       | 2.1 | 1.01 | 5.7 | 82  | 87th Barrio W. Shop  | 73  | 13 | 420 | 1.0 | 2.0  | 3.0 |
| 75       | 1178 Baker's 100       | 73  | ++ | 11.5       | 2.1 | 1.01 | 5.7 | 83  | 88th Barrio W. Shop  | 74  | 13 | 420 | 1.0 | 2.0  | 3.0 |
| 76       | 1179 Baker's 100       | 74  | ++ | 11.5       | 2.1 | 1.01 | 5.7 | 84  | 89th Barrio W. Shop  | 75  | 13 | 420 | 1.0 | 2.0  | 3.0 |
| 77       | 1180 Baker's 100       | 75  | ++ | 11.5       | 2.1 | 1.01 | 5.7 | 85  | 90th Barrio W. Shop  | 76  | 13 | 420 | 1.0 | 2.0  | 3.0 |
| 78       | 1181 Baker's 100       | 76  | ++ | 11.5       | 2.1 | 1.01 | 5.7 | 86  | 91st Barrio W. Shop  | 77  | 13 | 420 | 1.0 | 2.0  | 3.0 |
| 79       | 1182 Baker's 100       | 77  | ++ | 11.5       | 2.1 | 1.01 | 5.7 | 87  | 92nd Barrio W. Shop  | 78  | 13 | 420 | 1.0 | 2.0  | 3.0 |
| 80       | 1183 Baker's 100       | 78  | ++ | 11.5       | 2.1 | 1.01 | 5.7 | 88  | 93rd Barrio W. Shop  | 79  | 13 | 420 | 1.0 | 2.0  | 3.0 |
| 81       | 1184 Baker's 100       | 79  | ++ | 11.5       | 2.1 | 1.01 | 5.7 | 89  | 94th Barrio W. Shop  | 80  | 13 | 420 | 1.0 | 2.0  | 3.0 |
| 82       | 1185 Baker's 100       | 80  | ++ | 11.5       | 2.1 | 1.01 | 5.7 | 90  | 95th Barrio W. Shop  | 81  | 13 | 420 | 1.0 | 2.0  | 3.0 |
| 83       | 1186 Baker's 100       | 81  | ++ | 11.5       | 2.1 | 1.01 | 5.7 | 91  | 96th Barrio W. Shop  | 82  | 13 | 420 | 1.0 | 2.0  | 3.0 |
| 84       | 1187 Baker's 100       | 82  | ++ | 11.5       | 2.1 | 1.01 | 5.7 | 92  | 97th Barrio W. Shop  | 83  | 13 | 420 | 1.0 | 2.0  | 3.0 |
| 85       | 1188 Baker's 100       | 83  | ++ | 11.5       | 2.1 | 1.01 | 5.7 | 93  | 98th Barrio W. Shop  | 84  | 13 | 420 | 1.0 | 2.0  | 3.0 |
| 86       | 1189 Baker's 100       | 84  | ++ | 11.5       | 2.1 | 1.01 | 5.7 | 94  | 99th Barrio W. Shop  | 85  | 13 | 420 | 1.0 | 2.0  | 3.0 |
| 87       | 1190 Baker's 100       | 85  | ++ | 11.5       | 2.1 | 1.01 | 5.7 | 95  | 100th Barrio W. Shop | 86  | 13 | 420 | 1.0 | 2.0  | 3.0 |
| 88       | 1191 Baker's 100       | 86  | ++ | 11.5       | 2.1 | 1.01 | 5.7 | 96  | 101st Barrio W. Shop | 87  | 13 | 420 | 1.0 | 2.0  | 3.0 |
| 89       | 1192 Baker's 100       | 87  | ++ | 11.5       | 2.1 | 1.01 | 5.7 | 97  | 102nd Barrio W. Shop | 88  | 13 | 420 | 1.0 | 2.0  | 3.0 |
| 90       | 1193 Baker's 100       | 88  | ++ | 11.5       | 2.1 | 1.01 | 5.7 | 98  | 103rd Barrio W. Shop | 89  | 13 | 420 | 1.0 | 2.0  | 3.0 |
| 91       | 1194 Baker's 100       | 89  | ++ | 11.5       | 2.1 | 1.01 | 5.7 | 99  | 104th Barrio W. Shop | 90  | 13 | 420 | 1.0 | 2.0  | 3.0 |
| 92       | 1195 Baker's 100       | 90  | ++ | 11.5       | 2.1 | 1.01 | 5.7 | 100 | 105th Barrio W. Shop | 91  | 13 | 420 | 1.0 | 2.0  | 3.0 |
| 93       | 1196 Baker's 100       | 91  | ++ | 11.5       | 2.1 | 1.01 | 5.7 |     |                      | 92  | 13 | 420 | 1.0 | 2.0  | 3.0 |
| 94       | 1197 Baker's 100       | 92  | ++ | 11.5       | 2.1 | 1.01 | 5.7 |     |                      | 93  | 13 | 420 | 1.0 | 2.0  | 3.0 |
| 95       | 1198 Baker's 100       | 93  | ++ | 11.5       | 2.1 | 1.01 | 5.7 |     |                      | 94  | 13 | 420 | 1.0 | 2.0  | 3.0 |
| 96       | 1199 Baker's 100       | 94  | ++ | 11.5       | 2.1 | 1.01 | 5.7 |     |                      | 95  | 13 | 420 | 1.0 | 2.0  | 3.0 |
| 97       | 1200 Baker's 100       | 95  | ++ | 11.5       | 2.1 | 1.01 | 5.7 |     |                      | 96  | 13 | 420 | 1.0 | 2.0  | 3.0 |
| 98       | 1201 Baker's 100       | 96  | ++ | 11.5       | 2.1 | 1.01 | 5.7 |     |                      | 97  | 13 | 420 | 1.0 | 2.0  | 3.0 |
| 99       | 1202 Baker's 100       | 97  | ++ | 11.5       | 2.1 | 1.01 | 5.7 |     |                      | 98  | 13 | 420 | 1.0 | 2.0  | 3.0 |
| 100      | 1203 Baker's 100       | 98  | ++ | 11.5       | 2.1 | 1.01 | 5.7 |     |                      | 99  | 13 | 420 | 1.0 | 2.0  | 3.0 |
| 101      | 1204 Baker's 100       | 99  | ++ | 11.5       | 2.1 | 1.01 | 5.7 |     |                      | 100 | 13 | 420 | 1.0 | 2.0  | 3.0 |
| 102      | 1205 Baker's 100       | 100 | ++ | 11.5       | 2.1 | 1.01 | 5.7 |     |                      |     | 13 | 420 | 1.0 | 2.0  | 3.0 |
| 103      | 1206 Baker's 100       |     | ++ | 11.5       | 2.1 | 1.01 | 5.7 |     |                      |     | 13 | 420 | 1.0 | 2.0  | 3.0 |
| 104      | 1207 Baker's 100       |     | ++ | 11.5       | 2.1 | 1.01 | 5.7 |     |                      |     | 13 | 420 | 1.0 | 2.0  | 3.0 |
| 105      | 1208 Baker's 100       |     | ++ | 11.5       | 2.1 | 1.01 | 5.7 |     |                      |     | 13 | 420 | 1.0 | 2.0  | 3.0 |
| 106      | 1209 Baker's 100       |     | ++ | 11.5       | 2.1 | 1.01 | 5.7 |     |                      |     | 13 | 420 | 1.0 | 2.0  | 3.0 |
| 107      | 1210 Baker's 100       |     | ++ | 11.5       | 2.1 | 1.01 | 5.7 |     |                      |     | 13 | 420 | 1.0 | 2.0  | 3.0 |
| 108      | 1211 Baker's 100       |     | ++ | 11.5       | 2.1 | 1.01 | 5.7 |     |                      |     | 13 | 420 | 1.0 | 2.0  | 3.0 |
| 109      | 1212 Baker's 100       |     | ++ | 11.5       | 2.1 | 1.01 | 5.7 |     |                      |     | 13 | 420 | 1.0 | 2.0  | 3.0 |
| 110      | 1213 Baker's 100       |     | ++ | 11.5       | 2.1 | 1.01 | 5.7 |     |                      |     | 13 | 420 | 1.0 | 2.0  | 3.0 |
| 111      | 1214 Baker's 100       |     | ++ | 11.5       | 2.1 | 1.01 | 5.7 |     |                      |     | 13 | 420 | 1.0 | 2.0  | 3.0 |
| 112      | 1215 Baker's 100       |     | ++ | 11.5       | 2.1 | 1.01 | 5.7 |     |                      |     | 13 | 420 | 1.0 | 2.0  | 3.0 |
| 113      | 1216 Baker's 100       |     | ++ | 11.5       | 2.1 | 1.01 | 5.7 |     |                      |     | 13 | 420 | 1.0 | 2.0  | 3.0 |
| 114      | 1217 Baker's 100       |     | ++ | 11.5       | 2.1 | 1.01 | 5.7 |     |                      |     | 13 | 420 | 1.0 | 2.0  | 3.0 |
| 115      | 1218 Baker's 100       |     | ++ | 11.5       | 2.1 | 1.01 | 5.7 |     |                      |     | 13 | 420 | 1.0 | 2.0  | 3.0 |
| 116      | 1219 Baker's 100       |     | ++ | 11.5       | 2.1 | 1.01 | 5.7 |     |                      |     | 13 | 420 | 1.0 | 2.0  | 3.0 |
| 117      | 1220 Baker's 100       |     | ++ | 11.5       | 2.1 | 1.01 | 5.7 |     |                      |     | 13 | 420 | 1.0 | 2.0  | 3.0 |
| 118      | 1221 Baker's 100       |     | ++ | 11.5       | 2.1 | 1.01 | 5.7 |     |                      |     | 13 | 420 | 1.0 | 2.0  | 3.0 |
| 119      | 1222 Baker's 100       |     | ++ | 11.5       | 2.1 | 1.01 | 5.7 |     |                      |     | 13 | 420 | 1.0 | 2.0  | 3.0 |
| 120      | 1223 Baker's 100       |     | ++ | 11.5       | 2.1 | 1.01 | 5.7 |     |                      |     | 13 | 420 | 1.0 | 2.0  | 3.0 |
| 121      | 1224 Baker's 100       |     | ++ | 11.5       | 2.1 | 1.01 | 5.7 |     |                      |     | 13 | 420 | 1.0 | 2.0  | 3.0 |
| 122      | 1225 Baker's 100       |     | ++ | 11.5       | 2.1 | 1.01 | 5.7 |     |                      |     | 13 | 420 | 1.0 | 2.0  | 3.0 |
| 123      | 1226 Baker's 100       |     | ++ | 11.5       | 2.1 | 1.01 | 5.7 |     |                      |     | 13 | 420 | 1.0 | 2.0  | 3.0 |
| 124      | 1227 Baker's 100       |     | ++ | 11.5       | 2.1 | 1.01 | 5.7 |     |                      |     | 13 | 420 | 1.0 | 2.0  | 3.0 |
| 125      | 1228 Baker's 100       |     | ++ | 11.5       | 2.1 | 1.01 | 5.7 |     |                      |     | 13 | 420 | 1.0 | 2.0  | 3.0 |
| 126      | 1229 Baker's 100       |     | ++ | 11.5       | 2.1 | 1.01 | 5.7 |     |                      |     | 13 | 420 | 1.0 | 2.0  | 3.0 |
| 127      | 1230 Baker's 100       |     | ++ | 11.5       | 2.1 | 1.01 | 5.7 |     |                      |     | 13 | 420 | 1.0 | 2.0  | 3.0 |
| 128      | 1231 Baker's 100       |     | ++ | 11.5       | 2.1 | 1.01 | 5.7 |     |                      |     | 13 | 420 | 1.0 | 2.0  | 3.0 |
| 129      | 1232 Baker's 100       |     | ++ | 11.5       | 2.1 | 1.01 | 5.7 |     |                      |     | 13 | 420 | 1.0 | 2.0  | 3.0 |
| 130      | 1233 Baker's 100       |     | ++ | 11.5       | 2.1 | 1.01 | 5.7 |     |                      |     | 13 | 420 | 1.0 | 2.0  | 3.0 |
| 131      | 1234 Baker's 100       |     | ++ | 11.5       | 2.1 | 1.01 | 5.7 |     |                      |     | 13 | 420 | 1.0 | 2.0  | 3.0 |
| 132      | 1235 Baker's 100       |     | ++ | 11.5       | 2.1 | 1.01 | 5.7 |     |                      |     | 13 | 420 | 1.0 | 2.0  | 3.0 |
| 133      | 1236 Baker's 100       |     | ++ | 11.5       | 2.1 | 1.01 | 5.7 |     |                      |     | 13 | 420 | 1.0 | 2.0  | 3.0 |
| 134      | 1237 Baker's 100       |     | ++ | 11.5       | 2.1 | 1.01 | 5.7 |     |                      |     | 13 | 420 | 1.0 | 2.0  | 3.0 |
| 135      | 1238 Baker's 100       |     | ++ | 11.5       | 2.1 | 1.01 | 5.7 |     |                      |     | 13 | 420 | 1.0 | 2.0  | 3.0 |
| 136      | 1239 Baker's 100       |     | ++ | 11.5       | 2.1 | 1.01 | 5.7 |     |                      |     | 13 | 420 | 1.0 | 2.0  | 3.0 |
| 137      | 1240 Baker's 100       |     | ++ | 11.5       | 2.1 | 1.01 | 5.7 |     |                      |     | 13 | 420 | 1.0 | 2.0  | 3.0 |
| 138      | 1241 Baker's 100       |     | ++ | 11.5       | 2.1 | 1.01 | 5.7 |     |                      |     | 13 | 420 | 1.0 | 2.0  | 3.0 |
| 139      | 1242 Baker's 100       |     | ++ | 11.5       | 2.1 | 1.01 | 5.7 |     |                      |     | 13 | 420 | 1.0 | 2.0  | 3.0 |
| 140      | 1243 Baker's 100       |     | ++ | 11.5       | 2.1 | 1.01 | 5.7 |     |                      |     | 13 | 420 | 1.0 | 2.0  | 3.0 |
| 141      | 1244 Baker's 100       |     | ++ | 11.5       | 2.1 | 1.01 | 5.7 |     |                      |     | 13 | 420 | 1.0 | 2.0  | 3.0 |
| 142      | 1245 Baker's 100       |     | ++ | 11.5       | 2.1 | 1.01 | 5.7 |     |                      |     | 13 | 420 | 1.0 | 2.0  | 3.0 |
| 143      | 1246 Baker's 100       |     | ++ | 11.5       | 2.1 | 1.01 | 5.7 |     |                      |     | 13 | 420 | 1.0 | 2.0  | 3.0 |
| 144      | 1247 Baker's 100       |     | ++ | 11.5       | 2.1 | 1.01 | 5.7 |     |                      |     | 13 | 420 | 1.0 | 2.0  | 3.0 |
| 145      | 1248 Baker's 100       |     | ++ | 11.5       | 2.1 | 1.01 | 5.7 |     |                      |     | 13 | 420 | 1.0 | 2.0  | 3.0 |
| 146      | 1249 Baker's 100       |     | ++ | 11.5       | 2.1 | 1.01 | 5.7 |     |                      |     | 13 | 420 | 1.0 | 2.0  | 3.0 |
| 147      | 1250 Baker's 100       |     | ++ | 11.5       | 2.1 | 1.01 | 5.7 |     |                      |     | 13 | 420 | 1.0 | 2.0  | 3.0 |
| 148      | 1251 Baker's 100       |     | ++ | 11.5       | 2.1 | 1.01 | 5.7 |     |                      |     | 13 | 420 | 1.0 | 2.0  | 3.0 |
| 149      | 1252 Baker's 100       |     | ++ | 11.5       | 2.1 | 1.01 | 5.7 |     |                      |     | 13 | 420 | 1.0 | 2.0  | 3.0 |
| 150      | 1253 Baker's 100       |     | ++ | 11.5       | 2.1 | 1.01 | 5.7 |     |                      |     | 13 | 420 | 1.0 | 2.0  | 3.0 |
| 151      | 1254 Baker's 100       |     | ++ | 11.5       | 2.1 | 1.01 | 5.7 |     |                      |     | 13 | 420 | 1.0 | 2.0  | 3.0 |
| 152      | 1255 Baker's 100       |     | ++ | 11.5       | 2.1 | 1.01 | 5.7 |     |                      |     | 13 | 420 | 1.0 | 2.0  | 3.0 |
| 153      | 1256 Baker's 100       |     | ++ | 11.5       | 2.1 | 1.01 | 5.7 |     |                      |     | 13 | 420 | 1.0 | 2.0  | 3.0 |
| 154      | 1257 Baker's 100       |     | ++ | 11.5       | 2.1 | 1.01 | 5.7 |     |                      |     | 13 | 420 | 1.0 | 2.0  | 3.0 |
| 155      | 1258 Baker's 100       |     | ++ | 11.5       | 2.1 | 1.01 | 5.7 |     |                      |     | 13 | 420 | 1.0 | 2.0  | 3.0 |
| 156      | 1259 Baker's 100       |     | ++ | 11.5       | 2.1 | 1.01 | 5.7 |     |                      |     | 13 | 420 | 1.0 | 2.0  | 3.0 |
| 157      | 1260 Baker's 100       |     | ++ | 11.5       | 2.1 | 1.01 | 5.7 |     |                      |     | 13 | 420 | 1.0 | 2.0  | 3.0 |
| 158      | 1261 Baker's 100       |     | ++ | 11.5       | 2.1 | 1.01 | 5.7 |     |                      |     | 13 | 420 | 1.0 | 2.0  | 3.0 |
| 159      | 1262 Baker's 100       |     | ++ | 11.5       | 2.1 | 1.01 | 5.7 |     |                      |     | 13 | 420 | 1.0 | 2.0  | 3.0 |
| 160      | 1263 Baker's 100       |     | ++ | 11.5       | 2.1 | 1.01 | 5.7 |     |                      |     | 13 | 420 | 1.0 | 2.0  | 3.0 |
| 161      | 1264 Baker's 100       |     | ++ | 11.5       | 2.1 | 1.01 | 5.7 |     |                      |     | 13 | 420 | 1.0 | 2.0  | 3.0 |
| 162      | 1265 Baker's 100       |     | ++ | 11.5       | 2.1 | 1.01 | 5.7 |     |                      |     | 13 | 420 | 1.0 | 2.0  | 3.0 |
| 163      | 1266 Baker's 100       |     | ++ | 11.5       | 2.1 | 1.01 | 5.7 |     |                      |     | 13 | 420 | 1.0 | 2.0  | 3.0 |
| 164      | 1267 Baker's 100       |     | ++ | 11.5       | 2.1 | 1.01 | 5.7 |     |                      |     | 13 | 420 | 1.0 | 2.0  | 3.0 |
| 165      | 1268 Baker's 100       |     | ++ |            |     |      |     |     |                      |     |    |     |     |      |     |

|    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |     |
|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|-----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|-----|
| 28 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |     |
| 1  | 2  | 3  | 4  | 5  | 6  | 7  | 8  | 9  | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66  | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |
| 1  | 2  | 3  | 4  | 5  | 6  | 7  | 8  | 9  | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66  | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |
| 1  | 2  | 3  | 4  | 5  | 6  | 7  | 8  | 9  | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66  | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |
| 1  | 2  | 3  | 4  | 5  | 6  | 7  | 8  | 9  | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66  | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |
| 1  | 2  | 3  | 4  | 5  | 6  | 7  | 8  | 9  | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66  | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |
| 1  | 2  | 3  | 4  | 5  | 6  | 7  | 8  | 9  | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66  | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |
| 1  | 2  | 3  | 4  | 5  | 6  | 7  | 8  | 9  | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66  | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |
| 1  | 2  | 3  | 4  | 5  | 6  | 7  | 8  | 9  | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66  | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |
| 1  | 2  | 3  | 4  | 5  | 6  | 7  | 8  | 9  | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66  | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |
| 1  | 2  | 3  | 4  | 5  | 6  | 7  | 8  | 9  | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66  | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |
| 1  | 2  | 3  | 4  | 5  | 6  | 7  | 8  | 9  | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66  | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |
| 1  | 2  | 3  | 4  | 5  | 6  | 7  | 8  | 9  | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66  | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |
| 1  | 2  | 3  | 4  | 5  | 6  | 7  | 8  | 9  | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66  | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |
| 1  | 2  | 3  | 4  | 5  | 6  | 7  | 8  | 9  | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66  | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |
| 1  | 2  | 3  | 4  | 5  | 6  | 7  | 8  | 9  | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66  | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |
| 1  | 2  | 3  | 4  | 5  | 6  | 7  | 8  | 9  | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66  | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |
| 1  | 2  | 3  | 4  | 5  | 6  | 7  | 8  | 9  | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66  | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |
| 1  | 2  | 3  | 4  | 5  | 6  | 7  | 8  | 9  | 10 | 11 | 12 | 13 |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |     |

[illegible][illegible]

|     |     |          |     |    |   |      |     |       |    |    |             |     |   |      |     |
|-----|-----|----------|-----|----|---|------|-----|-------|----|----|-------------|-----|---|------|-----|
| 94  | 12  | Wassell  | 87  | 27 | 1 | 3    | 2.4 | 2.817 | 43 | 62 | A. W. Walsh | 51  | 2 | 16   | 2.6 |
| 95  | 30  | Massey   | 88  | 8  | 1 | 10   | 2.5 | 8.915 | 11 | 37 | Acronon     | 316 | 2 | 1422 | 1.1 |
| 96  | 39  | Monodach | 89  | 65 | 1 | 11   | 2.5 | 8.915 | 11 | 37 | Abraham     | 317 | 2 | 250  | 1.5 |
| 97  | 51  | McKee    | 90  | 87 | 1 | 11   | 2.1 | 4.514 | 10 | 32 | Abraham     | 318 | 2 | 1.1  | 1.4 |
| 98  | 60  | McKee    | 91  | 87 | 1 | 11   | 2.1 | 4.514 | 10 | 32 | Agar        | 319 | 2 | 9    | 2   |
| 99  | 72  | McKee    | 92  | 87 | 1 | 11   | 2.1 | 4.514 | 10 | 32 | Agar        | 320 | 2 | 9    | 2   |
| 100 | 87  | McKee    | 93  | 87 | 1 | 11   | 2.1 | 4.514 | 10 | 32 | Agar        | 321 | 2 | 9    | 2   |
| 101 | 94  | McKee    | 94  | 87 | 1 | 11   | 2.1 | 4.514 | 10 | 32 | Agar        | 322 | 2 | 9    | 2   |
| 102 | 101 | McKee    | 95  | 87 | 1 | 11   | 2.1 | 4.514 | 10 | 32 | Agar        | 323 | 2 | 9    | 2   |
| 103 | 108 | McKee    | 96  | 87 | 1 | 11   | 2.1 | 4.514 | 10 | 32 | Agar        | 324 | 2 | 9    | 2   |
| 104 | 115 | McKee    | 97  | 87 | 1 | 11   | 2.1 | 4.514 | 10 | 32 | Agar        | 325 | 2 | 9    | 2   |
| 105 | 122 | McKee    | 98  | 87 | 1 | 11   | 2.1 | 4.514 | 10 | 32 | Agar        | 326 | 2 | 9    | 2   |
| 106 | 129 | McKee    | 99  | 87 | 1 | 11   | 2.1 | 4.514 | 10 | 32 | Agar        | 327 | 2 | 9    | 2   |
| 107 | 136 | McKee    | 100 | 87 | 1 | 11   | 2.1 | 4.514 | 10 | 32 | Agar        | 328 | 2 | 9    | 2   |
| 108 | 143 | McKee    | 101 | 87 | 1 | 11   | 2.1 | 4.514 | 10 | 32 | Agar        | 329 | 2 | 9    | 2   |
| 109 | 150 | McKee    | 102 | 87 | 1 | 11   | 2.1 | 4.514 | 10 | 32 | Agar        | 330 | 2 | 9    | 2   |
| 110 | 157 | McKee    | 103 | 87 | 1 | 11   | 2.1 | 4.514 | 10 | 32 | Agar        | 331 | 2 | 9    | 2   |
| 111 | 164 | McKee    | 104 | 87 | 1 | 11   | 2.1 | 4.514 | 10 | 32 | Agar        | 332 | 2 | 9    | 2   |
| 112 | 171 | McKee    | 105 | 87 | 1 | 11   | 2.1 | 4.514 | 10 | 32 | Agar        | 333 | 2 | 9    | 2   |
| 113 | 178 | McKee    | 106 | 87 | 1 | 11   | 2.1 | 4.514 | 10 | 32 | Agar        | 334 | 2 | 9    | 2   |
| 114 | 185 | McKee    | 107 | 87 | 1 | 11   | 2.1 | 4.514 | 10 | 32 | Agar        | 335 | 2 | 9    | 2   |
| 115 | 192 | McKee    | 108 | 87 | 1 | 11   | 2.1 | 4.514 | 10 | 32 | Agar        | 336 | 2 | 9    | 2   |
| 116 | 199 | McKee    | 109 | 87 | 1 | 11   | 2.1 | 4.514 | 10 | 32 | Agar        | 337 | 2 | 9    | 2   |
| 117 | 206 | McKee    | 110 | 87 | 1 | 11   | 2.1 | 4.514 | 10 | 32 | Agar        | 338 | 2 | 9    | 2   |
| 118 | 213 | McKee    | 111 | 87 | 1 | 11   | 2.1 | 4.514 | 10 | 32 | Agar        | 339 | 2 | 9    | 2   |
| 119 | 220 | McKee    | 112 | 87 | 1 | 11   | 2.1 | 4.514 | 10 | 32 | Agar        | 340 | 2 | 9    | 2   |
| 120 | 227 | McKee    | 113 | 87 | 1 | 11   | 2.1 | 4.514 | 10 | 32 | Agar        | 341 | 2 | 9    | 2   |
| 121 | 234 | McKee    | 114 | 87 | 1 | 11   | 2.1 | 4.514 | 10 | 32 | Agar        | 342 | 2 | 9    | 2   |
| 122 | 241 | McKee    | 115 | 87 | 1 | 11   | 2.1 | 4.514 | 10 | 32 | Agar        | 343 | 2 | 9    | 2   |
| 123 | 248 | McKee    | 116 | 87 | 1 | 11   | 2.1 | 4.514 | 10 | 32 | Agar        | 344 | 2 | 9    | 2   |
| 124 | 255 | McKee    | 117 | 87 | 1 | 11   | 2.1 | 4.514 | 10 | 32 | Agar        | 345 | 2 | 9    | 2   |
| 125 | 262 | McKee    | 118 | 87 | 1 | 11   | 2.1 | 4.514 | 10 | 32 | Agar        | 346 | 2 | 9    | 2   |
| 126 | 269 | McKee    | 119 | 87 | 1 | 11   | 2.1 | 4.514 | 10 | 32 | Agar        | 347 | 2 | 9    | 2   |
| 127 | 276 | McKee    | 120 | 87 | 1 | 11   | 2.1 | 4.514 | 10 | 32 | Agar        | 348 | 2 | 9    | 2   |
| 128 | 283 | McKee    | 121 | 87 | 1 | 11   | 2.1 | 4.514 | 10 | 32 | Agar        | 349 | 2 | 9    | 2   |
| 129 | 290 | McKee    | 122 | 87 | 1 | 11   | 2.1 | 4.514 | 10 | 32 | Agar        | 350 | 2 | 9    | 2   |
| 130 | 297 | McKee    | 123 | 87 | 1 | 11   | 2.1 | 4.514 | 10 | 32 | Agar        | 351 | 2 | 9    | 2   |
| 131 | 304 | McKee    | 124 | 87 | 1 | 11   | 2.1 | 4.514 | 10 | 32 | Agar        | 352 | 2 | 9    | 2   |
| 132 | 311 | McKee    | 125 | 87 | 1 | 11   | 2.1 | 4.514 | 10 | 32 | Agar        | 353 | 2 | 9    | 2   |
| 133 | 318 | McKee    | 126 | 87 | 1 | 11   | 2.1 | 4.514 | 10 | 32 | Agar        | 354 | 2 | 9    | 2   |
| 134 | 325 | McKee    | 127 | 87 | 1 | 11   | 2.1 | 4.514 | 10 | 32 | Agar        | 355 | 2 | 9    | 2   |
| 135 | 332 | McKee    | 128 | 87 | 1 | 11   | 2.1 | 4.514 | 10 | 32 | Agar        | 356 | 2 | 9    | 2   |
| 136 | 339 | McKee    | 129 | 87 | 1 | 11   | 2.1 | 4.514 | 10 | 32 | Agar        | 357 | 2 | 9    | 2   |
| 137 | 346 | McKee    | 130 | 87 | 1 | 11   | 2.1 | 4.514 | 10 | 32 | Agar        | 358 | 2 | 9    | 2   |
| 138 | 353 | McKee    | 131 | 87 | 1 | 11   | 2.1 | 4.514 | 10 | 32 | Agar        | 359 | 2 | 9    | 2   |
| 139 | 360 | McKee    | 132 | 87 | 1 | 11   | 2.1 | 4.514 | 10 | 32 | Agar        | 360 | 2 | 9    | 2   |
| 140 | 367 | McKee    | 133 | 87 | 1 | 11   | 2.1 | 4.514 | 10 | 32 | Agar        | 361 | 2 | 9    | 2   |
| 141 | 374 | McKee    | 134 | 87 | 1 | 11   | 2.1 | 4.514 | 10 | 32 | Agar        | 362 | 2 | 9    | 2   |
| 142 | 381 | McKee    | 135 | 87 | 1 | 11   | 2.1 | 4.514 | 10 | 32 | Agar        | 363 | 2 | 9    | 2   |
| 143 | 388 | McKee    | 136 | 87 | 1 | 11   | 2.1 | 4.514 | 10 | 32 | Agar        | 364 | 2 | 9    | 2   |
| 144 | 395 | McKee    | 137 | 87 | 1 | 11   | 2.1 | 4.514 | 10 | 32 | Agar        | 365 | 2 | 9    | 2   |
| 145 | 402 | McKee    | 138 | 87 | 1 | 11   | 2.1 | 4.514 | 10 | 32 | Agar        | 366 | 2 | 9    | 2   |
| 146 | 409 | McKee    | 139 | 87 | 1 | 11   | 2.1 | 4.514 | 10 | 32 | Agar        | 367 | 2 | 9    | 2   |
| 147 | 416 | McKee    | 140 | 87 | 1 | 11   | 2.1 | 4.514 | 10 | 32 | Agar        | 368 | 2 | 9    | 2   |
| 148 | 423 | McKee    | 141 | 87 | 1 | 11   | 2.1 | 4.514 | 10 | 32 | Agar        | 369 | 2 | 9    | 2   |
| 149 | 430 | McKee    | 142 | 87 | 1 | 11   | 2.1 | 4.514 | 10 | 32 | Agar        | 370 | 2 | 9    | 2   |
| 150 | 437 | McKee    | 143 | 87 | 1 | 11   | 2.1 | 4.514 | 10 | 32 | Agar        | 371 | 2 | 9    | 2   |
| 151 | 444 | McKee    | 144 | 87 | 1 | 11   | 2.1 | 4.514 | 10 | 32 | Agar        | 372 | 2 | 9    | 2   |
| 152 | 451 | McKee    | 145 | 87 | 1 | 11   | 2.1 | 4.514 | 10 | 32 | Agar        | 373 | 2 | 9    | 2   |
| 153 | 458 | McKee    | 146 | 87 | 1 | 11   | 2.1 | 4.514 | 10 | 32 | Agar        | 374 | 2 | 9    | 2   |
| 154 | 465 | McKee    | 147 | 87 | 1 | 11   | 2.1 | 4.514 | 10 | 32 | Agar        | 375 | 2 | 9    | 2   |
| 155 | 472 | McKee    | 148 | 87 | 1 | 11   | 2.1 | 4.514 | 10 | 32 | Agar        | 376 | 2 | 9    | 2   |
| 156 | 479 | McKee    | 149 | 87 | 1 | 11   | 2.1 | 4.514 | 10 | 32 | Agar        | 377 | 2 | 9    | 2   |
| 157 | 486 | McKee    | 150 | 87 | 1 | 11   | 2.1 | 4.514 | 10 | 32 | Agar        | 378 | 2 | 9    | 2   |
| 158 | 493 | McKee    | 151 | 87 | 1 | 11   | 2.1 | 4.514 | 10 | 32 | Agar        | 379 | 2 | 9    | 2   |
| 159 | 500 | McKee    | 152 | 87 | 1 | 11   | 2.1 | 4.514 | 10 | 32 | Agar        | 380 | 2 | 9    | 2   |
| 160 | 507 | McKee    | 153 | 87 | 1 | 11   | 2.1 | 4.514 | 10 | 32 | Agar        | 381 | 2 | 9    | 2   |
| 161 | 514 | McKee    | 154 | 87 | 1 | 11   | 2.1 | 4.514 | 10 | 32 | Agar        | 382 | 2 | 9    | 2   |
| 162 | 521 | McKee    | 155 | 87 | 1 | 11   | 2.1 | 4.514 | 10 | 32 | Agar        | 383 | 2 | 9    | 2   |
| 163 | 528 | McKee    | 156 | 87 | 1 | 11   | 2.1 | 4.514 | 10 | 32 | Agar        | 384 | 2 | 9    | 2   |
| 164 | 535 | McKee    | 157 | 87 | 1 | 11   | 2.1 | 4.514 | 10 | 32 | Agar        | 385 | 2 | 9    | 2   |
| 165 | 542 | McKee    | 158 | 87 | 1 | 11   | 2.1 | 4.514 | 10 | 32 | Agar        | 386 | 2 | 9    | 2   |
| 166 | 549 | McKee    | 159 | 87 | 1 | 11   | 2.1 | 4.514 | 10 | 32 | Agar        | 387 | 2 | 9    | 2   |
| 167 | 556 | McKee    | 160 | 87 | 1 | 11   | 2.1 | 4.514 | 10 | 32 | Agar        | 388 | 2 | 9    | 2   |
| 168 | 563 | McKee    | 161 | 87 | 1 | 11   | 2.1 | 4.514 | 10 | 32 | Agar        | 389 | 2 | 9    | 2   |
| 169 | 570 | McKee    | 162 | 87 | 1 | 11   | 2.1 | 4.514 | 10 | 32 | Agar        | 390 | 2 | 9    | 2   |
| 170 | 577 | McKee    | 163 | 87 | 1 | 11   | 2.1 | 4.514 | 10 | 32 | Agar        | 391 | 2 | 9    | 2   |
| 171 | 584 | McKee    | 164 | 87 | 1 | 11   | 2.1 | 4.514 | 10 | 32 | Agar        | 392 | 2 | 9    | 2   |
| 172 | 591 | McKee    | 165 | 87 | 1 | 11   | 2.1 | 4.514 | 10 | 32 | Agar        | 393 | 2 | 9    | 2   |
| 173 | 598 | McKee    | 166 | 87 | 1 | 11   | 2.1 | 4.514 | 10 | 32 | Agar        | 394 | 2 | 9    | 2   |
| 174 | 605 | McKee    | 167 | 87 | 1 | 11   | 2.1 | 4.514 | 10 | 32 | Agar        | 395 | 2 | 9    | 2   |
| 175 | 612 | McKee    | 168 | 87 | 1 | 11   | 2.1 | 4.514 | 10 | 32 | Agar        | 396 | 2 | 9    | 2   |
| 176 | 619 | McKee    | 169 | 87 | 1 | 11   | 2.1 | 4.514 | 10 | 32 | Agar        | 397 | 2 | 9    | 2   |
| 177 | 626 | McKee    | 170 | 87 | 1 | 11   | 2.1 | 4.514 | 10 | 32 | Agar        | 398 | 2 | 9    | 2   |
| 178 | 633 | McKee    | 171 | 87 | 1 | 11   | 2.1 | 4.514 | 10 | 32 | Agar        | 399 | 2 | 9    | 2   |
| 179 | 640 | McKee    | 172 | 87 | 1 | 11   | 2.1 | 4.514 | 10 | 32 | Agar        | 400 | 2 | 9    | 2   |
| 180 | 647 | McKee    | 173 | 87 | 1 | 11   | 2.1 | 4.514 | 10 | 32 | Agar        | 401 | 2 | 9    | 2   |
| 181 | 654 | McKee    | 174 | 87 | 1 | 11   | 2.1 | 4.514 | 10 | 32 | Agar        | 402 | 2 | 9    | 2   |
| 182 | 661 | McKee    | 175 | 87 | 1 | 11   | 2.1 | 4.514 | 10 | 32 | Agar        | 403 | 2 | 9    | 2   |
| 183 | 668 | McKee    | 176 | 87 | 1 | 11   | 2.1 | 4.514 | 10 | 32 | Agar        | 404 | 2 | 9    | 2   |
| 184 | 675 | McKee    | 177 | 87 | 1 | 11   | 2.1 | 4.514 | 10 | 32 | Agar        | 405 | 2 | 9    | 2   |
| 185 | 682 | McKee    | 178 | 87 | 1 | 11   | 2.1 | 4.514 | 10 | 32 | Agar        | 406 | 2 | 9    | 2   |
| 186 | 689 | McKee    | 179 | 87 | 1 | 11   | 2.1 | 4.514 | 10 | 32 | Agar        | 407 | 2 | 9    | 2   |
| 187 | 696 | McKee    | 180 | 87 | 1 | 11   | 2.1 | 4.514 | 10 | 32 | Agar        | 408 | 2 | 9    | 2   |
| 188 | 703 | McKee    | 181 | 87 | 1 | 11   | 2.1 | 4.514 | 10 | 32 | Agar        | 409 | 2 | 9    | 2   |
| 189 | 710 | McKee    | 182 | 87 | 1 | 11   | 2.1 | 4.514 | 10 | 32 | Agar        | 410 | 2 | 9    | 2   |
| 190 | 717 | McKee    | 183 | 87 | 1 | 11   | 2.1 | 4.514 | 10 | 32 | Agar        | 411 | 2 | 9    | 2   |
| 191 | 724 | McKee    | 184 | 87 | 1 | 11   | 2.1 | 4.514 | 10 | 32 | Agar        | 412 | 2 | 9    | 2   |
| 192 | 731 | McKee    | 185 | 87 | 1 | 11   | 2.1 | 4.514 | 10 | 32 | Agar        | 413 | 2 | 9    | 2   |
| 193 | 738 | McKee    | 186 | 87 | 1 | 11   | 2.1 | 4.514 | 10 | 32 | Agar        | 414 | 2 | 9    | 2   |
| 194 | 745 | McKee    | 187 | 87 | 1 | 11   | 2.1 | 4.514 | 10 | 32 | Agar        | 415 | 2 | 9    | 2   |
| 195 | 752 | McKee    | 188 | 87 | 1 | 11   | 2.1 | 4.514 | 10 | 32 | Agar        | 416 | 2 | 9    | 2   |
| 196 | 759 | McKee    | 189 | 87 | 1 | 11</ |     |       |    |    |             |     |   |      |     |

|     |     |                |     |       |     |      |     |      |     |      |    |               |    |    |   |      |      |     |
|-----|-----|----------------|-----|-------|-----|------|-----|------|-----|------|----|---------------|----|----|---|------|------|-----|
| 18  | 20  | Trochilid      | 104 | + 21a | 16  | 1.9  | 3.9 | 3.5  | 4.4 | 501b | 17 | Burdanes      | Sp | 30 |   | 23   | 2.7  | 4.4 |
| 22  | 26  | Bobolink (10y) | 47  |       | 41b | 21.6 | 2.3 | 13.7 | 6.9 |      | 20 | Barnard & Hal | 0  | 76 | + | 15.2 | 26.6 |     |
| 42  | 46  | Turdus         | 31  |       | 35  | 50   | 2.0 | 6.5  | 7.8 |      | 20 | Barnard & Hal | 0  | 76 | + | 15.2 | 26.6 |     |
| 57  | 61  | Parula P. (1y) | 35  | + 2   | 39  | 50   | 2.0 | 6.5  | 7.8 |      | 20 | Barnard & Hal | 0  | 76 | + | 15.2 | 26.6 |     |
| 67  | 71  | Parula P. (1y) | 35  | + 2   | 39  | 50   | 2.0 | 6.5  | 7.8 |      | 20 | Barnard & Hal | 0  | 76 | + | 15.2 | 26.6 |     |
| 77  | 81  | Parula P. (1y) | 35  | + 2   | 39  | 50   | 2.0 | 6.5  | 7.8 |      | 20 | Barnard & Hal | 0  | 76 | + | 15.2 | 26.6 |     |
| 87  | 91  | Parula P. (1y) | 35  | + 2   | 39  | 50   | 2.0 | 6.5  | 7.8 |      | 20 | Barnard & Hal | 0  | 76 | + | 15.2 | 26.6 |     |
| 97  | 101 | Parula P. (1y) | 35  | + 2   | 39  | 50   | 2.0 | 6.5  | 7.8 |      | 20 | Barnard & Hal | 0  | 76 | + | 15.2 | 26.6 |     |
| 107 | 111 | Parula P. (1y) | 35  | + 2   | 39  | 50   | 2.0 | 6.5  | 7.8 |      | 20 | Barnard & Hal | 0  | 76 | + | 15.2 | 26.6 |     |
| 117 | 121 | Parula P. (1y) | 35  | + 2   | 39  | 50   | 2.0 | 6.5  | 7.8 |      | 20 | Barnard & Hal | 0  | 76 | + | 15.2 | 26.6 |     |
| 127 | 131 | Parula P. (1y) | 35  | + 2   | 39  | 50   | 2.0 | 6.5  | 7.8 |      | 20 | Barnard & Hal | 0  | 76 | + | 15.2 | 26.6 |     |
| 137 | 141 | Parula P. (1y) | 35  | + 2   | 39  | 50   | 2.0 | 6.5  | 7.8 |      | 20 | Barnard & Hal | 0  | 76 | + | 15.2 | 26.6 |     |
| 147 | 151 | Parula P. (1y) | 35  | + 2   | 39  | 50   | 2.0 | 6.5  | 7.8 |      | 20 | Barnard & Hal | 0  | 76 | + | 15.2 | 26.6 |     |
| 157 | 161 | Parula P. (1y) | 35  | + 2   | 39  | 50   | 2.0 | 6.5  | 7.8 |      | 20 | Barnard & Hal | 0  | 76 | + | 15.2 | 26.6 |     |
| 167 | 171 | Parula P. (1y) | 35  | + 2   | 39  | 50   | 2.0 | 6.5  | 7.8 |      | 20 | Barnard & Hal | 0  | 76 | + | 15.2 | 26.6 |     |
| 177 | 181 | Parula P. (1y) | 35  | + 2   | 39  | 50   | 2.0 | 6.5  | 7.8 |      | 20 | Barnard & Hal | 0  | 76 | + | 15.2 | 26.6 |     |
| 187 | 191 | Parula P. (1y) | 35  | + 2   | 39  | 50   | 2.0 | 6.5  | 7.8 |      | 20 | Barnard & Hal | 0  | 76 | + | 15.2 | 26.6 |     |
| 197 | 201 | Parula P. (1y) | 35  | + 2   | 39  | 50   | 2.0 | 6.5  | 7.8 |      | 20 | Barnard & Hal | 0  | 76 | + | 15.2 | 26.6 |     |
| 207 | 211 | Parula P. (1y) | 35  | + 2   | 39  | 50   | 2.0 | 6.5  | 7.8 |      | 20 | Barnard & Hal | 0  | 76 | + | 15.2 | 26.6 |     |
| 217 | 221 | Parula P. (1y) | 35  | + 2   | 39  | 50   | 2.0 | 6.5  | 7.8 |      | 20 | Barnard & Hal | 0  | 76 | + | 15.2 | 26.6 |     |
| 227 | 231 | Parula P. (1y) | 35  | + 2   | 39  | 50   | 2.0 | 6.5  | 7.8 |      | 20 | Barnard & Hal | 0  | 76 | + | 15.2 | 26.6 |     |
| 237 | 241 | Parula P. (1y) | 35  | + 2   | 39  | 50   | 2.0 | 6.5  | 7.8 |      | 20 | Barnard & Hal | 0  | 76 | + | 15.2 | 26.6 |     |
| 247 | 251 | Parula P. (1y) | 35  | + 2   | 39  | 50   | 2.0 | 6.5  | 7.8 |      | 20 | Barnard & Hal | 0  | 76 | + | 15.2 | 26.6 |     |
| 257 | 261 | Parula P. (1y) | 35  | + 2   | 39  | 50   | 2.0 | 6.5  | 7.8 |      | 20 | Barnard & Hal | 0  | 76 | + | 15.2 | 26.6 |     |
| 267 | 271 | Parula P. (1y) | 35  | + 2   | 39  | 50   | 2.0 | 6.5  | 7.8 |      | 20 | Barnard & Hal | 0  | 76 | + | 15.2 | 26.6 |     |
| 277 | 281 | Parula P. (1y) | 35  | + 2   | 39  | 50   | 2.0 | 6.5  | 7.8 |      | 20 | Barnard & Hal | 0  | 76 | + | 15.2 | 26.6 |     |
| 287 | 291 | Parula P. (1y) | 35  | + 2   | 39  | 50   | 2.0 | 6.5  | 7.8 |      | 20 | Barnard & Hal | 0  | 76 | + | 15.2 | 26.6 |     |
| 297 | 301 | Parula P. (1y) | 35  | + 2   | 39  | 50   | 2.0 | 6.5  | 7.8 |      | 20 | Barnard & Hal | 0  | 76 | + | 15.2 | 26.6 |     |
| 307 | 311 | Parula P. (1y) | 35  | + 2   | 39  | 50   | 2.0 | 6.5  | 7.8 |      | 20 | Barnard & Hal | 0  | 76 | + | 15.2 | 26.6 |     |
| 317 | 321 | Parula P. (1y) | 35  | + 2   | 39  | 50   | 2.0 | 6.5  | 7.8 |      | 20 | Barnard & Hal | 0  | 76 | + | 15.2 | 26.6 |     |
| 327 | 331 | Parula P. (1y) | 35  | + 2   | 39  | 50   | 2.0 | 6.5  | 7.8 |      | 20 | Barnard & Hal | 0  | 76 | + | 15.2 | 26.6 |     |
| 337 | 341 | Parula P. (1y) | 35  | + 2   | 39  | 50   | 2.0 | 6.5  | 7.8 |      | 20 | Barnard & Hal | 0  | 76 | + | 15.2 | 26.6 |     |
| 347 | 351 | Parula P. (1y) | 35  | + 2   | 39  | 50   | 2.0 | 6.5  | 7.8 |      | 20 | Barnard & Hal | 0  | 76 | + | 15.2 | 26.6 |     |
| 357 | 361 | Parula P. (1y) | 35  | + 2   | 39  | 50   | 2.0 | 6.5  | 7.8 |      | 20 | Barnard & Hal | 0  | 76 | + | 15.2 | 26.6 |     |
| 367 | 371 | Parula P. (1y) | 35  | + 2   | 39  | 50   | 2.0 | 6.5  | 7.8 |      | 20 | Barnard & Hal | 0  | 76 | + | 15.2 | 26.6 |     |
| 377 | 381 | Parula P. (1y) | 35  | + 2   | 39  | 50   | 2.0 | 6.5  | 7.8 |      | 20 | Barnard & Hal | 0  | 76 | + | 15.2 | 26.6 |     |
| 387 | 391 | Parula P. (1y) | 35  | + 2   | 39  | 50   | 2.0 | 6.5  | 7.8 |      | 20 | Barnard & Hal | 0  | 76 | + | 15.2 | 26.6 |     |
| 397 | 401 | Parula P. (1y) | 35  | + 2   | 39  | 50   | 2.0 | 6.5  | 7.8 |      | 20 | Barnard & Hal | 0  | 76 | + | 15.2 | 26.6 |     |
| 407 | 411 | Parula P. (1y) | 35  | + 2   | 39  | 50   | 2.0 | 6.5  | 7.8 |      | 20 | Barnard & Hal | 0  | 76 | + | 15.2 | 26.6 |     |
| 417 | 421 | Parula P. (1y) | 35  | + 2   | 39  | 50   | 2.0 | 6.5  | 7.8 |      | 20 | Barnard & Hal | 0  | 76 | + | 15.2 | 26.6 |     |
| 427 | 431 | Parula P. (1y) | 35  | + 2   | 39  | 50   | 2.0 | 6.5  | 7.8 |      | 20 | Barnard & Hal | 0  | 76 | + | 15.2 | 26.6 |     |
| 437 | 441 | Parula P. (1y) | 35  | + 2   | 39  | 50   | 2.0 | 6.5  | 7.8 |      | 20 | Barnard & Hal | 0  | 76 | + | 15.2 | 26.6 |     |
| 447 | 451 | Parula P. (1y) | 35  | + 2   | 39  | 50   | 2.0 | 6.5  | 7.8 |      | 20 | Barnard & Hal | 0  | 76 | + | 15.2 | 26.6 |     |
| 457 | 461 | Parula P. (1y) | 35  | + 2   | 39  | 50   | 2.0 | 6.5  | 7.8 |      | 20 | Barnard & Hal | 0  | 76 | + | 15.2 | 26.6 |     |
| 467 | 471 | Parula P. (1y) | 35  | + 2   | 39  | 50   | 2.0 | 6.5  | 7.8 |      | 20 | Barnard & Hal | 0  | 76 | + | 15.2 | 26.6 |     |
| 477 | 481 | Parula P. (1y) | 35  | + 2   | 39  | 50   | 2.0 | 6.5  | 7.8 |      | 20 | Barnard & Hal | 0  | 76 | + | 15.2 | 26.6 |     |
| 487 | 491 | Parula P. (1y) | 35  | + 2   | 39  | 50   | 2.0 | 6.5  | 7.8 |      | 20 | Barnard & Hal | 0  | 76 | + | 15.2 | 26.6 |     |
| 497 | 501 | Parula P. (1y) | 35  | + 2   | 39  | 50   | 2.0 | 6.5  | 7.8 |      | 20 | Barnard & Hal | 0  | 76 | + | 15.2 | 26.6 |     |
| 507 | 511 | Parula P. (1y) | 35  | + 2   | 39  | 50   | 2.0 | 6.5  | 7.8 |      | 20 | Barnard & Hal | 0  | 76 | + | 15.2 | 26.6 |     |
| 517 | 521 | Parula P. (1y) | 35  | + 2   | 39  | 50   | 2.0 | 6.5  | 7.8 |      | 20 | Barnard & Hal | 0  | 76 | + | 15.2 | 26.6 |     |
| 527 | 531 | Parula P. (1y) | 35  | + 2   | 39  | 50   | 2.0 | 6.5  | 7.8 |      | 20 | Barnard & Hal | 0  | 76 | + | 15.2 | 26.6 |     |
| 537 | 541 | Parula P. (1y) | 35  | + 2   | 39  | 50   | 2.0 | 6.5  | 7.8 |      | 20 | Barnard & Hal | 0  | 76 | + | 15.2 | 26.6 |     |
| 547 | 551 | Parula P. (1y) | 35  | + 2   | 39  | 50   | 2.0 | 6.5  | 7.8 |      | 20 | Barnard & Hal | 0  | 76 | + | 15.2 | 26.6 |     |
| 557 | 561 | Parula P. (1y) | 35  | + 2   | 39  | 50   | 2.0 | 6.5  | 7.8 |      | 20 | Barnard & Hal | 0  | 76 | + | 15.2 | 26.6 |     |
| 567 | 571 | Parula P. (1y) | 35  | + 2   | 39  | 50   | 2.0 | 6.5  | 7.8 |      | 20 | Barnard & Hal | 0  | 76 | + | 15.2 | 26.6 |     |
| 577 | 581 | Parula P. (1y) | 35  | + 2   | 39  | 50   | 2.0 | 6.5  | 7.8 |      | 20 | Barnard & Hal | 0  | 76 | + | 15.2 | 26.6 |     |
| 587 | 591 | Parula P. (1y) | 35  | + 2   | 39  | 50   | 2.0 | 6.5  | 7.8 |      | 20 | Barnard & Hal | 0  | 76 | + | 15.2 | 26.6 |     |
| 597 | 601 | Parula P. (1y) | 35  | + 2   | 39  | 50   | 2.0 | 6.5  | 7.8 |      | 20 | Barnard & Hal | 0  | 76 | + | 15.2 | 26.6 |     |
| 607 | 611 | Parula P. (1y) | 35  | + 2   | 39  | 50   | 2.0 | 6.5  | 7.8 |      | 20 | Barnard & Hal | 0  | 76 | + | 15.2 | 26.6 |     |
| 617 | 621 | Parula P. (1y) | 35  | + 2   | 39  | 50   | 2.0 | 6.5  | 7.8 |      | 20 | Barnard & Hal | 0  | 76 | + | 15.2 | 26.6 |     |
| 627 | 631 | Parula P. (1y) | 35  | + 2   | 39  | 50   | 2.0 | 6.5  | 7.8 |      | 20 | Barnard & Hal | 0  | 76 | + | 15.2 | 26.6 |     |
| 637 | 641 | Parula P. (1y) | 35  | + 2   | 39  | 50   | 2.0 | 6.5  | 7.8 |      | 20 | Barnard & Hal | 0  | 76 | + | 15.2 | 26.6 |     |
| 647 | 651 | Parula P. (1y) | 35  | + 2   | 39  | 50   | 2.0 | 6.5  | 7.8 |      | 20 | Barnard & Hal | 0  | 76 | + | 15.2 | 26.6 |     |
| 657 | 661 | Parula P. (1y) | 35  | + 2   | 39  | 50   | 2.0 | 6.5  | 7.8 |      | 20 | Barnard & Hal | 0  | 76 | + | 15.2 | 26.6 |     |
| 667 | 671 | Parula P. (1y) | 35  | + 2   | 39  | 50   | 2.0 | 6.5  | 7.8 |      | 20 | Barnard & Hal | 0  | 76 | + | 15.2 | 26.6 |     |
| 677 | 681 | Parula P. (1y) | 35  | + 2   | 39  | 50   | 2.0 | 6.5  | 7.8 |      | 20 | Barnard & Hal | 0  | 76 | + | 15.2 | 26.6 |     |
| 687 | 691 | Parula P. (1y) | 35  | + 2   | 39  | 50   | 2.0 | 6.5  | 7.8 |      | 20 | Barnard & Hal | 0  | 76 | + | 15.2 | 26.6 |     |
| 697 | 701 | Parula P. (1y) | 35  | + 2   | 39  | 50   | 2.0 | 6.5  | 7.8 |      | 20 | Barnard & Hal | 0  | 76 | + | 15.2 | 26.6 |     |
| 707 | 711 | Parula P. (1y) | 35  | + 2   | 39  | 50   | 2.0 | 6.5  | 7.8 |      | 20 | Barnard & Hal | 0  | 76 | + | 15.2 | 26.6 |     |
| 717 | 721 | Parula P. (1y) | 35  | + 2   | 39  | 50   | 2.0 | 6.5  | 7.8 |      | 20 | Barnard & Hal | 0  | 76 | + | 15.2 | 26.6 |     |
| 727 | 731 | Parula P. (1y) | 35  | + 2   | 39  | 50   | 2.0 | 6.5  | 7.8 |      | 20 | Barnard & Hal | 0  | 76 | + | 15.2 | 26.6 |     |
| 737 | 741 | Parula P. (1y) | 35  | + 2   | 39  | 50   | 2.0 | 6.5  | 7.8 |      | 20 | Barnard & Hal | 0  | 76 | + | 15.2 | 26.6 |     |
| 747 | 751 | Parula P. (1y) | 35  | + 2   | 39  | 50   | 2.0 | 6.5  | 7.8 |      | 20 | Barnard & Hal | 0  | 76 | + | 15.2 | 26.6 |     |
| 757 | 761 | Parula P. (1y) | 35  | + 2   | 39  | 50   | 2.0 | 6.5  | 7.8 |      | 20 | Barnard & Hal | 0  | 76 | + | 15.2 | 26.6 |     |
| 767 | 771 | Parula P. (1y) | 35  | + 2   | 39  | 50   | 2.0 | 6.5  | 7.8 |      | 20 | Barnard & Hal | 0  | 76 | + | 15.2 | 26.6 |     |
| 777 | 781 | Parula P. (1y) | 35  | + 2   | 39  | 50   | 2.0 | 6.5  | 7.8 |      | 20 | Barnard & Hal | 0  | 76 | + | 15.2 | 26.6 |     |
| 787 | 791 | Parula P. (1y) | 35  | + 2   | 39  | 50   | 2.0 | 6.5  | 7.8 |      | 20 | Barnard & Hal | 0  | 76 | + | 15.2 | 26.6 |     |
| 797 | 801 | Parula P. (1y) | 35  | + 2   | 39  | 50   | 2.0 | 6.5  | 7.8 |      | 20 | Barnard & Hal | 0  | 76 | + | 15.2 | 26.6 |     |
| 807 | 811 | Parula P. (1y) | 35  | + 2   | 39  | 50   | 2.0 | 6.5  | 7.8 |      | 20 | Barnard & Hal | 0  | 76 | + | 15.2 | 26.6 |     |
| 817 | 821 | Parula P. (1y) | 35  | + 2   | 39  | 50   | 2.0 | 6.5  | 7.8 |      | 20 | Barnard & Hal | 0  | 76 | + | 15.2 | 26.6 |     |
| 827 | 831 | Parula P. (1y) | 35  | + 2   | 39  | 50   | 2.0 | 6.5  | 7.8 |      | 20 | Barnard & Hal | 0  | 76 | + | 15.2 | 26.6 |     |
| 837 | 841 | Parula P. (1y) | 35  | + 2   | 39  | 50   | 2.0 | 6.5  | 7.8 |      | 20 | Barnard & Hal | 0  | 76 | + | 15.2 | 26.6 |     |
| 847 | 851 | Parula P. (1y) | 35  | + 2   | 39  | 50   | 2.0 | 6.5  | 7.8 |      | 20 | Barnard & Hal | 0  | 76 | + | 15.2 | 26.6 |     |
| 857 | 861 | Parula P. (1y) | 35  | + 2   | 39  | 50   | 2.0 | 6.5  | 7.8 |      | 20 | Barnard & Hal | 0  | 76 | + | 15.2 | 26.6 |     |
| 867 | 871 | Parula P. (1y) | 35  | + 2   | 39  | 50   | 2.0 | 6.5  | 7.8 |      | 20 | Barnard & Hal | 0  | 76 | + | 15.2 | 26.6 |     |
| 877 | 881 | Parula P. (1y) | 35  | + 2   | 39  | 50   | 2.0 | 6.5  | 7.8 |      | 20 | Barnard & Hal | 0  | 76 | + | 15.2 | 26.6 |     |
| 887 | 891 | Parula P. (1y) | 35  | + 2   | 39  | 50   | 2.0 | 6.5  | 7.8 |      | 20 | Barnard & Hal | 0  | 76 | + | 15.2 | 26.6 |     |
| 897 | 901 | Parula P. (1y) | 35  | + 2   |     |      |     |      |     |      |    |               |    |    |   |      |      |     |

[illegible][illegible][illegible][illegible]

**"Recent Issues" and "Rights" Pages:**



## INSURANCE

For Notes, see Stock Exchange Dealings.

Registered at the G.P.O. Printed by St. Clements Press Ltd. for and published by THE FINANCIAL TIMES  
LTD., Bracken House, Cannon Street, London. E.C.4



Index fell 0.8 to 415.7



Lombard

## Making a good job of index-linking

BY C. GORDON TETHER

THE National Old People's Welfare Council touches on an issue of considerable importance for people of all ages when it alleges that the Government's plan for reviewing pensions at two-yearly intervals to ensure that their real purchasing power is maintained will effectively cheat each of the recipients not of £30 over the next two years. For now that it has been belatedly recognised that index-linking must become a standard feature of the nation's financial life, there is everything to be said for seeing that it is operated efficiently—and for broad economic reasons as well as for considerations of social justice.

It may seem odd that now that Whitehall has conceded that there ought to be a proper machinery for ensuring that social welfare payments keep pace with the rise in the cost-of-living, the first thing the National Old People's Welfare Council does is to complain about it. The fact is, however, that the arrangements for giving effect to the official decision do not pay adequate regard to the reasoning that prompted it.

### Out-dated

Thus it was obviously the tendency for the pace of inflation to increase in a basic sense that finally persuaded the Government that the old rough-and-ready method of adjusting social service payments to preserve their purchasing power was no longer satisfactory. Yet, for purposes of administrative convenience, it was decided to fix the interval at which payments were to be reviewed under the new system at no less than two years.

Given a situation wherein the annual fall in purchasing power of money is almost never short of 5 per cent. and sometimes breaks into double figures—which is the situation we've had since 1967—the results of these exercises are apt to be out-dated before they are a few months old.

Clearly, if the new system is to fulfil its purpose, either the two-yearly reviews will have to make provision in their awards for future erosion of the purchasing power of the currency based on inflation "guesstimates"—which would be unsatisfactory—or they will have to take place at much shorter intervals.

### Wages field

Alternatively, provision could be made for adjusting payments automatically, between reviews—say from quarter to quarter—in the light of changes in the cost of living index. This would leave the two-yearly examinations to consider the cases for making changes on other grounds—for example, to allow the recipients to participate in any general rise in the country's living standards produced by economic growth.

The point is that the nation cannot get full value for money from the inevitable spread of index-linking unless we make sure that the arrangements for giving effect to it are much more realistic than those which the Government has established for social welfare payments. And in saying this I am not only thinking of social justice. There are powerful economic arguments pointing in the same direction. For all practical purposes, the need to see that incomes keep pace with the rise in the cost-of-living is now recognised as a sine qua non of all wage bargaining. And this means that index-linking must be done in a way which does not come from a distant, formal procedure for giving effect to index-linking in this field.

### Regulation

For one thing, by eliminating all room for argument about the erosive effect of the rise in the cost-of-living, it would tend to reduce the scope for industrial disputes. For unions would then be able to submit claims for higher pay only if they could adduce other strong arguments to support them. For another, it would make it impossible for unions to exploit inflation to get bigger cost-of-living awards than are justified—for example, by asking to be compensated at each annual review for the increase in the cost-of-living that has taken place since the last one, as well as for the increase expected before the next.

It is sometimes argued that index-linking perpetuates inflation by causing each upward movement in incomes to provoke another. The truth is that this happens in any case once inflation moves out of the very lowest gear. The introduction of efficient index-linking actually serves to regulate this reaction in such a way as to minimise its harmful implications for the afflicted country's social justice and economic health.

## THE LEX COLUMN

# No sparks from Marks

Following Monday's Glaxo—now down 39p to 380p in two days—Marks and Spencer is the second big bubble that has burst this week. Neither company, given its limitations, has performed badly. Glaxo being short of capacity and vulnerable to inflation, while the warning signals have been out for Marks following the short-term effect of the July purchase tax cuts (stock losses) on other retailers. The upshot for Marks, which exaggerated the purchase tax effect by immediately passing on the SET cuts to the consumer as well as first-half profits up 5.1 per cent. to £15.1m. pre-tax from a 13.8 per cent. rise in sales. The effect on the market was a 14p fall to 287p leaving a p/e of 29 on earnings of 9.55p a share for the past reported 12 months.

Adding back the SET/purchase tax costs, profits would have been 11 per cent. higher, indicating a half-yearly margin of 12.1 per cent. (11.95 and 11.8 per cent. over the past 18 months. The shading here can probably be explained by the increasing proportion of food sales, up 19.9 per cent. in the latest half year against an 11.7 per cent. rise in clothing; it is probably more disquieting that multiple women's clothing shops over the first five months of the period showed a 12.6 per cent. rise, since this could be the first time for years that Marks has failed to grow faster. The discount, of course, is strictly relative. But given that the market, lately, has had a habit of expecting Marks to better its own growth standards, the share price could continue to suffer.

### Ocean Steam

Ocean Steam's interim figures have a P and O look about them, with a drop from £1.95m. to £1.09m. at the trading level—though after another helping of dealing profits in short gulls the pre-tax decline has been held to £3m. against £3.77m. However, the implication of the forecast for the year is that the situation is turning round quite smartly. On the investment side the

second half contribution will be sharply lower at some £0.8m., reflecting the rundown of liquid funds, reduced interest rates and the absence of capital profits. Shipping profits, on the other hand, are expected to shoot up to £3m. for the current half, making the pre-tax total for 1971 some £7.05m. against £6.53m., and taking earnings ahead from 8.5p to 9.9p a share—ignoring here association company losses (mainly in OCL), which amount to £200,000 or 1.3p a share.

The background to all this is the rise in freight rates in both Ocean's main operating areas—by around 10 per cent. last February on the Far East run, and by 15 per cent. in July on the West African services. Meanwhile cost problems like the 1970 fuel oil spiral have been brought more under control. So Ocean looks like heating its earlier hopes for the year, and its optimism about the next couple of years remains intact. It would be comforting to see a better trend at OCL ahead of

the containerisation of the Far Eastern services, due for next year and 1973. Still, there has been time for lessons to be learned, and a prospective p/e of 10.7 at 103p leaves plenty of room for an upward earnings trend to be reflected.

See Page 24

### Chloride

Chloride's bid for Oldham is small, adding under 3 per cent. to the ultimate equity of 15 per cent. to turnover. It also has a couple of hurdles to get over—like Carlton Industries sitting on over a quarter of the Oldham equity and the possibility of a Monopolies reference even if Carlton backs down. Still, the bid was a good excuse for Chloride to put out its half-year profits: at £3.6m. pre-tax, against £1.24m., they were greeted by a share price up 25p to 141p.

In a sense the reaction seems exaggerated, given that Chloride made £3.6m. in the second half of last year, that the lead price has been moving in its favour—averaging £103 against £123 for

the same half of 1970-71—and that its forecast of 1971-72 profits more than 50 per cent. higher need not require much growth in the second half of this time. However, the lead price is not as important as it looks, given that a metal recovery process accounts for about a half of Chloride's lead usage; the second half is seasonally more profitable for the battery business; and Chloride has a change in pricing policy (upwards) to help it along at EPS, the main U.K. lead battery subsidiary. So there should be growth enough to support a p/e of 14.8 on earnings of 9.9p fully diluted for the past 12 months.

### Babcock & Wilcox

Babcock and Wilcox's interim results need, as usual, to be read line by line. Profits pre-tax and interest are just £255,000 higher at £1.49m., and £101,000 of that is a hangover from the year-end accounting change. Now the fun begins. Investment income is marginally higher, and will be so over

the year; gross interest charges are only £91,000 down at £1.07m., but that takes in rising work-in-progress. Loss elimination in Mexico helps to knock the tax charge from 53 to 30 per cent. minorities are down and—hey presto—we have attributable profits up from £183,000 to £246,000.

That, and the forecast of improved "trading results" over the year will presumably please the market this morning, although the cynics will mutter that loss reduction in Mexico, Muir-Hill and Babcock-Mosey implied all this anyway. But the improvement in the last two companies will have more of an impact over the rest of the year, which lends credence to some estimates of a prospective p/e at under 14 at 260p. There is a new uncertainty in the shape of possible further provisions against an overseas contract currently subject to litigation. Yet at least the shares have more of an earnings prop now, even if they may remain a trading situation for the time being.

See Page 22

# Tory anti-Marketeers to fight rearguard action

BY JOHN BOURNE, LOBBY EDITOR

OUT-GUNNED but still denying that they are out-gunned, the Tory anti-Marketeers are gathering here for the Conservative Party's annual conference. They concede that to-morrow the conference will vote overwhelmingly in favour of the EEC entry terms and will give cheering accolades to Mr. Geoffrey Rippon and Sir Alec Douglas-Home. But they are determined to demonstrate that, although they will lose the early battles—including the Commons vote on October 28—they will fight on.

A fishing boat carrying a large floodlighter emblemized with "no to the Common Market" will bob off Brighton pier opposite the conference hall for the rest of this week; sandwichmen will march about the streets; and the Mermade Restaurant next to the party headquarters has been transformed into an Anti-Common Market Information Centre.

And to-morrow night, after being routed by the party conference, the anti-Marketeers will retreat to the main hall of the Faculty of Art and Design on the Grand Parade, where MPs Neil Marten, Angus Maude, Sir Gerald Nabarro and Enoch Powell will conduct a spirited rearguard action.

The main purpose of these demonstrations is to rally the Tory troops for the coming campaign against the Government's

Common Market legislation, which will occupy Parliament for most of next year. Like their counterparts in the Labour Party, the Tory anti-Marketeers are now concentrating their thoughts on how to destroy Britain's membership of the EEC.

Not at one blow on October 28, but during the long days and nights of guerrilla warfare in the Commons which will follow. They refuse to accept that, once the legislative process begins, the Government has all the odds in its favour. Although recognising that at any stage of the legislation a majority of one vote will be enough to see the Government through, they say they are convinced that the Government can still be defeated.

Labour rebels Ministers, however, claim that the anti-Marketeers are really on the run and that by talking now of defeating the legislation they are merely whistling to keep their spirits up. The Government believes not only that it can achieve a majority of MPs in favour of the entry terms without relying on Labour pro-Marketeers but that once that vote is over, the anti-Marketeers on both sides of the House will diminish sharply.

Even at this stage Tory anti-Marketeers admit that their voting strength in Parliament has been eroded over the last few months. The hard core of Tory MPs who say they are determined to vote against British entry is now down to about 30, and Ministers are convinced that in the next two weeks they can bring this total down to under 15. If so this would be enough to force the Government to a bare majority on October 28, to which must be added, however, many Labour pro-Marketeers who decide to vote with the Government. But because a Labour vote gained for the Government is a vote lost for the Opposition, one Labour rebel is worth two Tory supporters.

Labour's leaders believe there are 30-40 dedicated pro-Marketeers in their own party who might vote for the Government. Their aim will be to whittle down the number of these rebels, but the Government will aim to do the same to the number of its anti-Market MPs. No one can yet forecast precise results, but on the present rough arithmetic the Government seems certain of an adequate majority on October 28.

The agenda for this week's Conservative conference is peppered with motions which, while expressing loyalty to the Government, show there is deep anxiety in the party about the Government's failure to halt rising unemployment and prices. But the motions selected by the party leaders for debate do not fully reflect this unease.

Shadow Cabinet Meeting, Page 26

# Bill planned on monopoly law reforms next session

BY COLIN JONES

A MAJOR re-casting of the Monopolies Commission, involving a separation of its investigatory and quasi-judicial functions and wide-ranging changes in the present law on monopolies and restrictive practices, will be proposed by the Government in a Bill during the coming Parliamentary session.

But the pressure for legislative time will probably preclude detailed reform. Concerning the information companies have to disclose in their accounts, these changes are likely to be held over in form part of a major reform of Company Law in a later session of this Parliament.

### Main aims

One of the main objects of the new monopolies and restrictive practices Bill, which is seen by Ministers as forming the centrepiece of the Government's "competition policy," will be to make the new investigatory body the substantive and expert source of information on imperfect competition.

For this reason, the office of the Registrar of Restrictive Trading Agreements is likely to be incorporated in the new investigatory organisation. This new

body may also be given a special brief to watch out for consumers' interests in certain areas—such as the consumer trades—although a major overhaul of the present consumer legislation, including matters such as weights and measures, will probably be left until later.

The decision to separate the investigatory and quasi-judicial roles of the present Monopolies Commission will meet criticism of the Commission being allowed to act as "prosecutor" and "tribunal" in its investigations. But this will be at the cost of creating a three-tier structure, since the findings of any investigation will still be passed back to Ministers as under the present system.

It is hoped, however, that all three tiers will be involved only on relatively few occasions, and that the "tribunal" of an investigation of the facts may be enough to secure the voluntary abandonment of abuses of market power or of unfair practices that do not fall within the scope of the Restrictive Practices Court.

Several changes in the law on monopolies and restrictive practices were foreshadowed by Mr. John Davies, Secretary of State for Trade and Industry, in an interim statement last December. He then instanced the possibility of bringing service industries within the scope of the Restrictive Practices Court, making anti-competitive practices by individual firms registrable, and outlawing additional types of restrictive agreement.

Consideration has also been given to the present rule which limits investigations into the use of market power to cases where one company or a group of companies by agreement control at least a third of the market. In addition, the new Bill is expected to give the new investigatory body adequate powers to conduct inquiries into specific marketing or pricing practices by the nationalised industries.

Although these industries have been included within the potential scope of Monopolies Commission references in theory since the 1948 Monopolies Act and in practice since the Minister's statement last December, the Commission's activities in this field have been inhibited by its inability under present law to command witnesses and call for evidence.

# Government concern over low-price tours

BY ARTHUR SANDLES

THE BRITISH GOVERNMENT delegate to the travel industry conference here to-day added his warning to the many others that have been voiced officially recently on the hatline economics of tour operating. He told package tour operators that "if anyone comes a cropper now be going to come a tremendous cropper."

The 2,000 delegates to the annual conference of the Association of British Travel Agents were debating the issue of whether package tours were too cheap, leaving little or no profit and no room for emergency flexibility. Mr. Ray Colegate, of the Department of Trade and Industry, was chairman at the session and tried to keep a balance in fierce industry cross-fire.

Mr. Vladimir Raitz, owner of

Horizon Tours, argued strongly that the economics of the industry were all wrong and that prices had to rise. I see no other way of getting round this except by getting together," he said. "Costs have been escalating continuously. We have turned a blind eye to this."

This was not well received by either Mr. Tom Gullick of Clarksons or Mr. Bryan Llewellyn of Thomson. Mr. Gullick said: "It is our job to keep the product at as low a price as we can do. The public's protection is the operator's reliance on repeat bookings. The whole point about low prices is to get people in who have never been on a foreign holiday."

Mr. Llewellyn felt that there was a misconception of a correlation between price and quality. The public's protection is the operator's reliance on repeat bookings. The whole point about low prices is to get people in who have never been on a foreign holiday."

These two men are the ones

BRIGHTON, Oct. 12.

THE TREND of industrial output in the U.K. is still flat according to figures released by the Central Statistical Office yesterday.

Between July and August the official production index fell from 125.9 to 125.8 on a seasonal basis (1963=100), and for manufacturing industry alone the fall was greater—from 128.3 in July to 126.8.

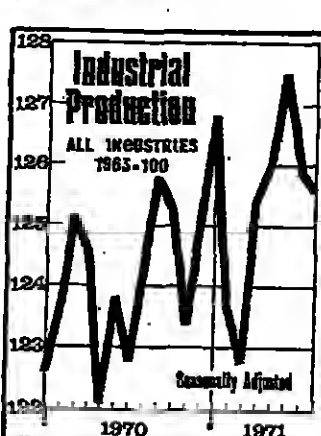
### Distorted

The generally more reliable three-monthly comparison shows a 1.3 per cent. increase in production between the periods March-May and June-August, but this has been badly distorted by the loss of output in the earlier months as a result of prolonged strikes.

Once this distortion is allowed for, the view in Whitehall is that there has been virtually no change in the underlying trend of production, which has been flat throughout the year. Neither the production figures nor the capital investment plans of industrialists give any indication of an upturn in the economy. The Prime Minister's statement on Monday that the economy was set for expansion appears to have been based primarily on what has been done to stimulate expansion, rather than on any concrete results of these measures.

The promise of a revival of output was implicit in the results of the Confederation of British Industry's latest trends survey last week, but the chairman of the CBI's economics committee, Sir Hugh Weeks, said it was too early to predict the timing or the extent of a recovery.

The Treasury's monthly assessment of the economic situation—due later to-day—will probably point to the recent revival of



consumer spending as indicated by the figures for sales of cars and consumer durables. This revival is being treated with some caution in Whitehall at present. The main increase in production, which has been flat throughout the year, appears to have been based primarily on what has been done to stimulate expansion, rather than on any concrete results of these measures.

The promise of a revival of output was implicit in the results of the Confederation of British Industry's latest trends survey last week, but the chairman of the CBI's economics committee, Sir Hugh Weeks, said it was too early to predict the timing or the extent of a recovery.

The Treasury's monthly assessment of the economic situation—due later to-day—will probably point to the recent revival of

# Chloride, Oldham agree to merge

BY NICHOLAS LESLIE

THE U.K.'s two biggest manufacturers of re-chargeable batteries, at just over 45p a share. On the Chloride Electrical Storage and Oldham International, are to 52p.

With a possible monopoly of the battery market being created, Chloride has already sounded out the Department of Trade and Industry on whether the deal might be referred to the Monopolies Commission. In the meantime, Chloride's argument against a monopoly is, basically, that no such situation would arise if Britain joins the Common Market.

Announcing the deal yesterday, the two companies stated that discussions had been held "with a view to strengthening the British battery industry, bearing in mind the now probable entry of the U.K. into the European Economic Community." The discussions showed there would be substantial advantages since the competitive position would be significantly improved within the EEC and world battery markets.

Another influence on the deal could be the 25 per cent. holding which Carlton Industries has in Oldham. This was acquired when Carlton—which is part of Sir Max Rayne's London Merchant Securities—made an abortive bid for Oldham in June last year.

Commenting on its half-time figures, Chloride said the improvement resulted mainly from progress in the U.K. battery business, particularly in Electric Power Storage, which traded at a low level in the first half of 1970-71, when there were also redundancy payments to be met. Therefore, the same rate of growth is not expected in the second half of the current year, although final profits are expected to be more than 50 per cent. ahead of the £4.87m. pre-tax figure for the year to March, 1971.

In the merger negotiations, Chloride was advised by Lazard Brothers and Oldham by Kleinwort Benson. Full details will be sent to shareholders.

Chloride's battery-powered recovery Page 13

# Production still stagnant and no sign of early rise

BY WILLIAM KEEGAN, ECONOMICS CORRESPONDENT

from the CSO that new methods of calculating the engineering production figures will lead to smaller and fewer revisions to the overall figures in future.

An excellent illustration of the pitfalls of "one month's figures" is provided by the fact that the latest revision to the June index of manufacturing production entirely offsets the fall in the index which had been announced earlier.

Not only that, but a downward revision to the May figure means that the index now records a rise in production between the two months, and not a fall.

The CSO has decided that the first estimates of engineering production in any one month based on returns from a relatively small number of respondents are more of an obstacle than a guide. (Engineering accounts for a sixth of the total index.)

The fuller information available in later months has led to such drastic revisions that the CSO claims it can arrive at a better idea of the trend by, in effect, forecasting the month's engineering production figure.

This is done on the basis of a weighted average trend of past indices, which takes full account of the latest information for production in the months immediately preceding the month in question.

### More reliable

The CSO says: "From now on the first monthly estimates for engineering will be obtained in this way and will not be revised until firm estimates for a calendar quarter are available from a Department of Trade and Industry inquiry."

For the period of the past 18 months this method has predicted the index for these industries in its final quarterly form much more reliably than the early monthly estimates based directly on the returns from firms available at the time.

# Dear Breadwinner

Sorry I laughed when you nearly fell downstairs this morning. Didn't mean to. You were right to be frightened. I was too when I thought of it. The children and I are totally dependent on you. Money would soon run out. Fixing the stair carpet is not enough.

Soon after, your father phoned. "Tell him to give the risk on his life to the Scottish Provident. They are used to accepting risks. In return you get security. It's done so you all benefit—even if he doesn't have an accident."

"He selects one of their endowment assurances. It's only a few pounds a month, whatever he can afford. Then they insure his life for thousands of pounds. Tell him if he doesn't give my favourite daughter-in-law more security I'll disinherit him!" End of message.

Supper is in the oven. Don't burn yourself on the dish. Please fetch me early darling, you know how boring Maggie's bridge evenings are.

Kisses, Tessa.

You win both ways with a Scottish Provident endowment: security in case of death; or a handsome cash payout if you survive. It's very simple and secure. Of course, for the very best, ask your broker about Selected Period Investment. It's a unique Scottish Provident idea. No broker? Then look in the yellow pages. Or send for our leaflet.

NAME Mr./Mrs./Miss \_\_\_\_\_  
ADDRESS \_\_\_\_\_  
Date of Birth \_\_\_\_\_ Monthly Payment £ \_\_\_\_\_  
THE Scottish Provident  
helps you look ahead with assurance. INSTITUTION  
6 St. Andrew Square, Edinburgh EH2 2YA. Tel: 031-556 1407

**AUSTINS**  
FOR  
LLOYDS TESTED  
STEEL  
FROM STOCK  
DEWSBURY 5175

## Weather

### U.K. TO-DAY

A trough of low pressure will move south-east across England and Wales followed by a cold northerly airstream. Scotland and Northern Ireland will have scattered showers, but little snow on high ground. England and Wales will be generally cloudy with rain at times which may be heavy or prolonged in places. It will be cold in the North but near normal temperatures are expected in the South.

London, S.E. Cent. S. and S.W. light. Max 18C (64F). Cloudy, rain at times perhaps heavy and prolonged later. W. S.W. light later N. moderate, Max 16C (61F).

Channel Islands. Rather cloudy, rain later. W. S.W. light. Max 18C (64F). E. Anglia, E. England, E. and W. Midlands, N. and S. Wales. Cloudy, rain perhaps heavy at prolonged at times. Wind light variable, becoming light to N. moderate. Max 15C (59F).

Cent. N. N.E., N.W. England, Isle of Man. Cloudy, rain, heavy and prolonged at times, becoming mainly dry later. Wind N.E. moderate, fresh. Max 11C (52F).

Borders, E. Scotland, Edinburgh. Scattered showers, bright spell frost early and late. Wind N.E. light to moderate. Max 11C (52F).

N.W. S.W. Scotland, N. Ireland. Scattered showers, sunny spell frost early and late, wind N. moderate. Max 10C (49F).

Calcutta, Orissa, S. India. Scattered showers, sunny spell, wind N. light to moderate. Max 10C (50F).

Outlook: Mainly dry, colder South. Rain likely in West. Lightning: London 18.43.

### BUSINESS CENTRES

| City         | Y'day | Mid-day | Y'day | Mid-day |
|--------------|-------|---------|-------|---------|
| Americas     | C 14  | 14      | 14    | 14      |
| Bahamas      | C 14  | 14      | 14    | 14      |
| Bahia        | C 14  | 14      | 14    | 14      |
| Bombay       | C 14  | 14      | 14    | 14      |
| Buenos Aires | C 14  | 14      | 14    | 14      |
| Calcutta     | C 14  | 14      | 14    | 14      |
| Cardiff      | C 14  | 14      | 14    | 14      |
| Cebu         | C 14  | 14      | 14    | 14      |
| Colon        | C 14  | 14      | 14    | 14      |
| Hankow       | C 14  | 14      | 14    | 14      |
| Hong Kong    | C 14  | 14      | 14    | 14      |
| Kobe         | C 14  | 14      | 14    | 14      |
| London       | C 14  | 14      | 14    | 14      |
| Lyons        | C 14  | 14      | 14    | 14      |
| Manila       | C 14  | 14      | 14    | 14      |
| Medan        | C 14  | 14      | 14    | 14      |
| Osaka        | C 14  | 14      | 14    | 14      |
| Shanghai     | C 14  | 14      | 14    | 14      |
| Singapore    | C 14  | 14      | 14    | 14      |
| Sourabaya    | C 14  | 14      | 14    | 14      |
| Tokyo        | C 14  | 14      | 14    | 14      |
| Yokohama     | C 14  | 14      | 14    | 14      |

### HOLIDAY RESORTS

|          | Mid-day |    |           | Mid-day |    |
|----------|---------|----|-----------|---------|----|
|          | °C      | °F |           | °C      | °F |
| Amstrdm. | C 17    | 63 | Manchur.  | C 17    | 63 |
| Sahraïn  | C 29    | 84 | Melbourne | C 13    | 55 |
| Beirut   | C 24    | 75 | Mexico C. | C 19    | 66 |
| Beilast  | C 3     | 48 | Adlan     | C 10    | 50 |
| Belgrade | C 22    | 72 | Montreal  | C 9     | 48 |
| Berlin   | F 20    | 68 | Moscow    | F 14    | 57 |
| Birmmgh. | C 14    | 57 | Munach    | S 18    | 64 |
| Brussel. | S 18    | 66 | Newcastle | C 16    | 61 |
| Budapest | C 20    | 68 | New York  | S 12    | 54 |
| B. Aires | C 12    | 54 | Osln      | R 8     | 46 |
| Carro    | S 18    | 66 | Paris     | F 12    | 54 |
| Cardiff  | C 14    | 57 | Prague    | S 12    | 54 |
| Cologne  | F 18    | 64 | Reykjavik | N 12    | 54 |
| Constan. | F 18    | 64 |           |         |    |